

BIOSPHERE RESERVES

**LINKING
CONSERVATION
AND DEVELOPMENT**

WHY NOT BOSNIA? AND CHECHNYA?

Azzouz Elbakhouchi
Teacher
Meknes (Morocco)

   I really like your magazine and often discuss the issues raised with friends who find it useful and rich in research.

The articles published in the October issue (*Sources*, No. 62) on the culture of peace in Africa were especially interesting.

With this in mind, I would like to suggest devoting an issue, if possible, to the problems in Bosnia and Herzegovina as well as that in Chechnya.



We regularly publish articles about UNESCO's assistance to Bosnia and Herzegovina - whether they be about an independent television station in Sarajevo or the construction of schools for refugee children. But the Organization is not yet active in Chechnya - ED.

LEARNING TO GET BETTER ACQUAINTED

F. Bertrand
Maire de Bois (France)

   Your magazine is very well researched. The in-depth articles provide a vision on parts of the world that we learn to get better acquainted with. As well, the vivid photographs used as illustrations shed light on the problems put forth in the articles.

A NICE RING TO IT

Mariana Schmidt Q.
Editorial Board
"Alegria de Enseñar" Magazine
Cali (Colombia)

   I really enjoy the tone of *Sources*. On the one hand, the magazine makes us aware that we are part of a world inhabited by men and women fighting in different countries for common ideas - which helps us to feel that we are not alone. On the other hand, it enables us to understand the importance of exchanges between comrades from other regions of the world.

With regards to our own magazine, we would like very much to establish contact with those outside of Colombia working to improve the quality of education, particularly regarding the training of teaching personnel.

"IT'S REALLY TOO BAD!"

C.A. Guiyama-Massaga
Philosophy assistant
University of Bangui
Central African Republic

   As a regular reader of *Sources*, I appreciate the quality of the articles published. However, don't you think that it would be preferable to have the editorials correspond with the focus of the issue? I felt misled while reading René Lefort's "Going where?" (*Sources*, No. 63). His editorial raised an important and timely subject concerning the revolution referred to as "the information superhighway". I wanted to know more about this development than just its title, but, unfortunately, it just wasn't followed up in the rest of the issue. It's really too bad!



UNESCO should start thinking about this topic in terms of its activities. This would provide us with the opportunity to come back to the subject in future issues - ED.

THE INs AND OUTs OF SAFE SEX

Charles Garcin
Retired professor
Nice (France)

   I would like to politely offer an observation concerning a phrase in the article entitled, "Fighting Aids in East Africa" (*Sources*, No. 65). The line in question is the following: the association members "distribute information materials, encourage the use of condoms and other safe sex practices". It is this last part which prompted me to write. I would like to understand the reasons for not further explaining these safe sex practices. If the author's intention is to encourage his Ugandan compatriots to protect themselves against AIDS, I don't see why he should not provide information about all of the possible means.

I am very old and don't have any personal motives for this information. But why not inform young people of these practices? That's the one thing I could do with those around me!

WILLING TO CHANGE?

From whichever angle you look at the environment, it's clear that the crisis between human beings and nature is deepening. Scientists can today analyse and measure the problems, and identify possible solutions. But they alone can't implement those solutions. At two recent meetings, in Sevilla and Berlin, the message was that the ball is no longer in the scientists' court.

At the Sevilla meeting, towards the end of March, 400 experts from UNESCO's worldwide biosphere reserve network took a long hard look at the accomplishments and failures of the past 20 years and outlined their future directions. Beyond the technical and institutional issues, they also examined the role of the biosphere reserves. Their primordial mission, the experts concluded, is to provide a "sound scientific base" on which to build models of sustainable development.

However there can be no sustainable development, they stressed, unless "all of the social, cultural, spiritual and economic needs" of society are taken into account, and current trends are clearly not headed in this direction. Then, in Berlin at the beginning of April, climatologists came together for the first annual conference on the Climate Change Convention drawn up with great pomp and ceremony at the Rio Earth Summit in 1992. Apart from an isolated few, this group of scientists is convinced that the global climate is changing, and that these changes are not "natural" but the result of an accumulation of "greenhouse gases" in the atmosphere. The only solution here is to stop the increase and eventually decrease the amounts of these gases spewed out by our industries. This would inevitably mean major economic upheaval and radical lifestyle changes.

The scientists have clearly shown that the good ship Earth is heading into dangerous waters. But the captain is unlikely to change the heading unless the crew imposes its will to reach a safe harbour.

René LEFORT



Herders on the trek in Mali's Boucle Loop Biosphere Reserve.



Waiting for peace in Somalia.



Arab's cultural heritage in danger.

Cover photo:
© Kim Castells



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UNESCO SOURCES

BOOKS

**WORKING WITH STREET CHILDREN
SELECTED CASE-STUDIES
FROM AFRICA, ASIA
AND LATIN AMERICA**

Generally ignored by national authorities, the plight of street children has been largely left to individuals, religious groups and NGOs.



The diverse nature of their efforts is presented in this book which puts forth 18 of the more effective projects as case studies offering strategies and methods to teachers, social educators and rehabilitation managers working with these children. The book takes a global approach by considering as street children the estimated 100 million children in Africa, Asia and Latin America who survive on meagre incomes earned on the street and have only the vaguest sense of familial or institutional relationships. Four basic approaches to support and reintegrate these children are presented: informal education; training programmes; techniques to effectively "use the street"; and administrative structures designed to offer the children a sense of security and control over their lives. Without resorting to melodrama or indignant demands, the book presents the 'nuts and bolts' of effective and relatively modest programmes.

- *Working with street children - Selected case-studies from Africa, Asia and Latin America*, UNESCO/International Catholic Child Bureau 1995, Youth Plus series, 303 pp., 95 FF.

RECENT TRENDS AND DEVELOPMENTS IN EDUCATIONAL PSYCHOLOGY: CHINESE AND AMERICAN PERSPECTIVES

This booklet consists of two reports commissioned by UNESCO in 1992 as background papers for the Organization's biennial World Education Report. The first draws a broad picture of the interplay between traditional Chinese ideas on psychology and foreign theories. The resulting mix emphasizes the harmonious development of the whole personality encouraged by teaching approaches based on interactions between knowledge, emotion, desire and action. The second report rethinks original notions of learning as a process of building associations. It outlines research indicating that the learner is not a passive recipient, but rather an active party constructing knowledge in developing a more flexible or subtle sense of understanding.

- *Recent trends and developments in educational psychology: Chinese and American perspectives*, Educational studies and documents, No. 61, UNESCO, 1995, 52 pp., 35 FF.

COPING WITH CRISIS - AUSTERITY, ADJUSTMENT AND HUMAN RESOURCES

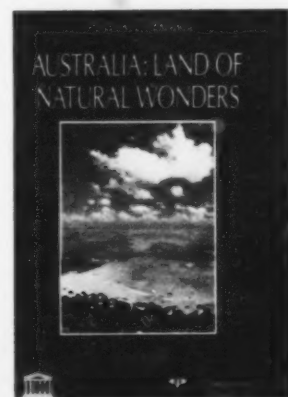
Faced with enormous debts stemming from the economic crises of the 80s, countries around the world have undergone major structural reorganization. This has largely meant cuts in public expenditures of which education has been a prime target. However, a joint task force set up by UNESCO and the International Labour Organization (ILO) takes an

alternative approach in suggesting that successful reorganization may require increased investment in human resources. The book presents five case studies on Brazil, Costa Rica, Hungary, Senegal and Tanzania prepared by the UNESCO/ILO team of economists, education specialists and sociologists.

- *Coping with Crisis - Austerity, Adjustment and Human Resources*, edited by Joel Samoff, Cassell/UNESCO 1994, 284 pp., 170 FF.

AUSTRALIA: LAND OF NATURAL WONDERS

The book's full-size colour photos and animated text sweeps the adventurous reader, especially those between the ages of 8 to 15, off to Australia. Start off visiting the world's oldest polished stones in Kakadu National Park and then dive along the Great Barrier Reef stretching 2000 km. Dip down to Tasmania, where impenetrable thickets and the world's largest temperate forest are home to the quarrelsome but harmless Tasmanian devil. Trek along sand dunes in the Willandra Lake Region before



heading into the tropical rain forests of Queensland. And there's no forgetting the magical red glow of Ayers or Uluru Rock.

- *Australia: Land of Natural Wonders*, The World Heritage series, Childrens Press/UNESCO, 1994, 34 pp., 72 FF.

PERIODICALS

INTERNATIONAL SOCIAL SCIENCE JOURNAL

Measuring and Evaluating Development. How can we measure and evaluate development, conceived as an integral process with social, cultural and economic dimensions? To what extent can this development be measured in quantitative terms, and what place must be reserved for qualitative assessment? These are some of the central questions addressed in this issue (No. 143), prepared on the occasion of the World Summit for Social Development (Copenhagen, March 1995). A team of specialists discuss the technical and historical dimensions of these problems and the links with social welfare and cohesion, the environment, human rights and democracy.

**THE UNESCO COURIER
The Pilgrim's Way.**

The May issue of *The Courier* invites us on a journey to the sacred landmarks and "pathways to enlightenment" of all religions. From Jerusalem, "the thrice holy city", trek along the riverbanks of the Ganges before visiting one hundred temples in Shikoku (Japan). From Spain's Saint-Jacques de Compostela, explore the holy places of Tiberias and Zefat in the Galilee (Israel) before meeting "the messengers of light", Chinese Buddhist pilgrims in India during the seventh century as well as today's pilgrims in Mecca. Historians, researchers and writers recount their visions of these holy places. The issue opens with an interview with French Abbot Pierre, known for his tireless defense of socio-economically excluded people.

Publications and periodicals are on sale at the UNESCO Bookshop, or by order from UNESCO Publishing, 7 place de Fontenay, 75352 Paris 07 SP, and in Member States through national distributors. Catalogue available on request.

RENZO PIANO: UNESCO'S "BAD BOY" GONE GOOD

I think the 'Goodwill' in my new title means respecting that quality architecture and city design should reflect harmony and balance between what has already been done and what can be done. One cannot be a 'modernist' without first understanding heritage and one cannot be a 'traditionalist' without first realising that everything that is built was once modern."

Coming from the architect perhaps most widely known for designing the Georges Pompidou Centre - Paris' impetuously modern "anti-monument" - the above



RENZO PIANO
(Photo UNESCO/Inez Forbes).

these intimidating Paris monuments with a totally new emotion: one of curiosity."

After overseeing the completion of the museum in 1978, the exhausted young architect accepted UNESCO's request to help restore ancient urban centres in Italy, Crete, Rhodes and Dakar.

This 17-year collaboration not only brought praise to the Organization but helped to influence Piano's later work. Asked why he devoted so much time to UNESCO, he said, "it was probably casual and I still have a lot of friends here, but part of why I started is because of a curiosity growing inside me then about the social and traditional aspects of architecture... UNESCO is in spirit a place where you try to understand not just how to do something but why to do something."

Piano's work includes some of the decade's most important commissions. He recently designed three concert halls in Rome, a square at Berlin's Potsdammer Platz and Kansai International Airport in Osaka. As a Goodwill Ambassador, Piano said, "my job is not to be a theorist. My job is not to tell the moral of a story. A good writer should just write and a painter should paint. I just want to build."

This philosophy is perhaps best reflected in his offer to revitalize UNESCO's Fontenay headquarters as part of the Organization's 50th anniversary celebrations. "My idea is that UNESCO should open its doors to the city. Let's try to end the fortress mentality created by the outer walls."

Jo HIRONAKA

● "I am a Muslim married to a Catholic woman and my daughter is married to an Orthodox, so we miss only a Jewish person in the family," wrote Izet Sarajlic, a 65-year-old poet and author living in

Sarajevo, while boasting of his family on Internet, the global computer network. "I hope that my grandson Vladimir will take care of that." Launched by UNESCO and the World Media Network, the

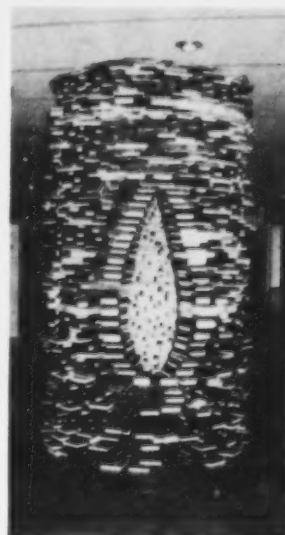
MATEJ KREN: MAKING UP FOR A "LOSS OF TALENT"

My life is complicated - maybe yours is too. Finding the time and money for family and also for exhibitions is difficult. But it's like the tower - you cannot reach to the top at first. You must build it slowly." The metaphor comes to life with Matej Kren, the Slovak artist who was awarded a special UNESCO Prize for the Promotion of Arts worth \$12,000 on 19 April for his "Idiom", the 3-metre-high tower of books installed at Headquarters. Cuban artist Alexis Leyva Machado, known as Kcho, also won a special prize with seven smaller awards given to artists chosen amongst the 322 contestants from 91 countries.

At first glance, Kren's installation appears as a neatly stacked cylinder of books - granted, its a pretty big stack but nothing extraordinary. But peek through the opening and, suddenly, an endless tower rises overhead with a bottomless well dropping at your feet. Kren creates the illusion with two mirrors.

At 37, Kren's career is taking off with the help of galleries and sponsors enabling him to travel and show his work mostly in Europe and the United States. While not "starving", the life of the artist isn't easy. Kren doesn't have his own apartment, let alone a studio with Slovakia's economic crisis. "There, you can work as an artist but you cannot live as one with most of the galleries closed. People don't have money or time for art. With communism, they didn't have money either. But there were always concerts and shows - like islands of culture."

Disappointment aside, Kren is not longing for the old days. In 1982, he was expelled from



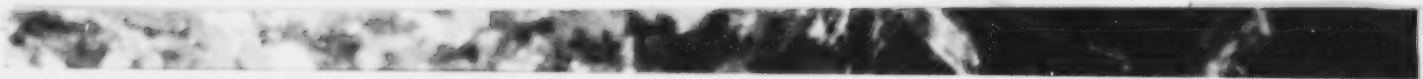
(Photo UNESCO/M. Claude).

Bratislava's Academy of Fine Arts for his "loss of talent". Ironically, this came just after he won a major prize in a national student competition. "It was all politics. My work wasn't provocative but it didn't fit with the official vision of aesthetics. I hated to paint Lenin's portrait. So, I started working in secret and doing shows in friends' basements. It was like a game to see how far you could go. But when the teachers found out, there was trouble."

Following the Velvet Revolution, Kren thrived on a more tolerant cultural life which he feels has been cut short. "We're feeling the pressure again. Before, it was communism. Now, it's nationalism. People don't seem to like being free," says Kren, who considers leaving Slovakia. "Who knows? Maybe it'll get better. But I just cannot wait any more."

Amy OTCHET

by the Oslobođenje newspaper and the radio station Studio 99. While recounting their daily lives, many people expressed anger and frustration with the war which, they say, is fuelled by extremists.



BIOSPHERE RESERVES: LINKING CONSERVATION AND DEVELOPMENT

Can we preserve the wealth of our environment - its biodiversity - by putting it "under glass" in a constellation of protected spaces? "Illusion" affirmed some 400 experts from the Man and Biosphere Programme's "biosphere reserves" at a meeting in Sevilla in March. In the long run, there is no fence capable of holding back the vital needs of some or the appetite for green spaces of others (see below). There is, however, another option: responding to these forces, but through ecologically healthy solutions - in other words, "sustainable development".

This dossier presents several attempts to manage the problems, such as those posed by nomads and poachers in Mali's Baoule Loop (p.10) or tourists in the outer suburbs of Jakarta in Indonesia (p.14). The key to success lies in the support and sometimes even the statutory involvement of local populations, as in Costa Rica (p.9), Argentina (p.11) and Australia (p.15) as well as cooperation between public agencies, industry and ecology groups, as in the Southern Appalachias in the USA (p.16).

7.....

A crackdown on marijuana plantations in Mexico has sent demand for the drug soaring in the United States. But the pressure put on this traditional US supply source has had other effects. A few thousand kilometres south, in Colombia's Sierra Santa Marta Biosphere Reserve, farmers have cleared the forest to grow cannabis.

The reserve's biodiversity has been damaged and its rivers have dried up in the plains. The million and a half people who live there have been hit very hard.

Some 400 managers and experts running the world's biosphere reserves (see box) who gathered in Sevilla, Spain, from March 20-25 can give countless other examples.

They came together to draw up a balance sheet of their work and produce some new ideas. They all agreed that their main aim - preserving biodiversity - was impossible if they were be limited to just working in the biosphere reserve itself.

The cause-and-effect relationship between the reserves and the immediately surrounding areas and, by extension, those further away, is so important and affects such a broad range of things, that the reserves won't end up preserving very much unless their management principles are extended to those surrounding areas.

The experts came with further proof, if it was still needed, that an environmental solution must take in not just biological and zoological scientific data but also economic, financial and demographic factors - all of them political, in reality - both inside and outside a conservation zone.

So the role of "local people" in running a reserve was at the centre of all the discussions. Experience and common sense show that these inhabitants must be treated properly. The range of terms to describe their involvement showed the very many possibilities of it. Keeping local people informed is the least requirement for any hope of winning their acceptance of conservation measures, which are inevitably going to limit their freedom. But this approach is still rare and, being one-way, yields very little.

At the other end of the scale, you have local people co-managing the reserve, with elected representatives on the executive board. This has two advantages. Researchers are finding that local communities have priceless, centuries-old knowledge not just about the present environment but also ideas about how to manage it in the future. This makes the researcher's job easier, whether it be conservation or the quest for sustainable development.

For the local people, making their views known or convincing others of them means they can start up or resume activities which, with proper backing, can make up for those that conservation measures have reduced or stopped entirely. This can be straight replacement - a hunter who becomes a ranger on the reserve, with the job of keeping an eye on the wildlife, or a "witch doctor" or "shaman" who is given the task of gathering medicinal plants which are of increasing interest to multinational pharmaceutical companies.

New prospects might also revive those activities which have more or less died out. In the Guatemala Maya Reserve, for example, 7,000 jobs have been created collecting chicle from trees to make chewing gum and gathering spices and palm products. This brings in about \$7m a year for the local people.

Without such alternatives, pressure grows to the point when it overwhelms the reserve. "When a protected area becomes the cherry on the cake, you can be sure someone's going to eat it in the end," says Jesus Casas, an expert from Spain. In many poor countries, a reserve - with its open spaces, forests, wildlife and vegetation - is understandably seen as an El Dorado by land-hungry peasants, nomads looking for

new pastures, women seeking fuel for cooking and by anyone with only wild animals as a source of protein.

In view of their great poverty, it would be indecent to ask them in effect to "commit suicide", as one African expert puts it, so as to preserve some endangered species. In rich countries, it is usually the appetite of property developers for "green spaces" that is harder and harder to curb.

At any rate, making reserves into protected "islands" in an increasingly impoverished and chaotic world is a pipe dream which the Sevilla conference killed stone dead.

From now on, any environmental policy which does not take into account the huge chunk of society falling in between the necessarily tiny and scattered areas which are 100% protected and the big urban and industrial centres is doomed to fail.

The idea that needs to be pushed is what Mexico's Gonzalo Halffter, a leading light

in the Man and Biosphere programme, calls "rustic farming." This would be based on the balance between people and nature which prevailed more or less up until the Industrial Revolution and the huge population growth which came just before it. It would aim for more efficient land use with much greater yields than there were back then, but without the present aggressiveness caused by intensive use of fertilizers and the like. This would be made possible by using the latest scientific knowledge available.

Such perfect logic but so hard to put into practice... A policy like this clearly has radical implications. First of all, the managers of the biosphere reserves, most of whom once worked for national parks, sometimes balk at working with economists, agronomists, anthropologists and other specialists in the humanities. But without such help, promoting sustainable development will remain impossible. Their complete coordination is generally indispensable for running reserves well. Administration is normally dispersed among various ministries and local authorities. But most of all, if the inevitably lower farm yields resulting from such a policy are possible in the rich countries - the biggest consumers of water and chemicals - it certainly won't be popular in many third world countries.

Apart from that, the changes needed to develop rustic farming would include all areas of human activity - its organization and relations between them - in fact the entire modern establishment.

The first paragraph of the "Vision for the 21st century" document, produced at the Sevilla conference, lists the main threats to today's environment. It also ticks off the negative trends in the world: "Population

IN SEVILLA

The Sevilla Conference brought together experts to discuss the results of the action plan adopted at the first International Congress on Biosphere reserves in Minsk in 1983 and to make new proposals. Among the suggestions were greater involvement of reserves in regional environment and development matters and making the linking network more effective.

The conference came up with a kind of general policy statement "A Vision for the 21st Century", a new action plan (The "Sevilla Strategy") and a draft set of principles for the international network of reserves. The last two documents will be put before the next UNESCO General Conference.

growth and distribution, increasing demands for energy and natural resources, globalisation of the economy and the effects of trade patterns on rural areas, the erosion of cultural distinctiveness, centralization and difficulty of access to relevant information and uneven spread of technological innovations."

By going to Sevilla, were the Man and Biosphere experts being Don Quixotes? They had plenty of watertight evidence to show that the worsening crisis in relations between people and nature demands quick discovery of less rapacious alternatives. In this, the biosphere reserves should play a leading part - as laboratories, testing grounds and as models of sane management of nature and, ultimately, examples of "a more sustainable future".

René LEFORT
Sevilla (Spain)

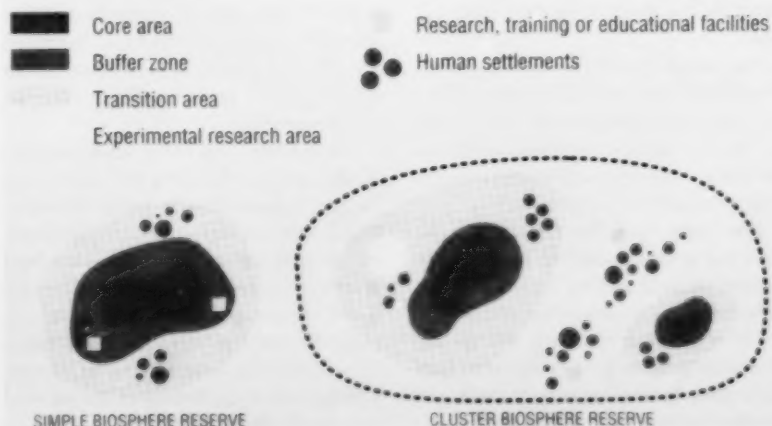
A BIOSPHERE RESERVE IS...

The biosphere reserves - the heart of the Man and Biosphere (MAB) programme - must each: preserve biodiversity and ecosystems; have development which is in tune with this aim; be actively involved in the research, observation, education and training network which links all the reserves.

MAB administrators say about a third of the reserves do not fulfil all these conditions.

A reserve must also contain three kinds of zones: one or more central areas (the "core") where, in most cases, no kind of economic activity is allowed; around the core, one or more buffer zones, mainly set aside for research and education and with controlled access; a transition area for experiments in sustainable development, which are often grouped together.

Since the first one was created in 1976, 321 biosphere reserves have been set up in 82 countries. They offer a representative sample of about half of all the bioregions around the world and range in size from a few hundred hectares to the 300,000 square km of Brazil's Atlantic Forest system. Some are practically uninhabited. Others have a population of several million. The main regional networks are EUROMAB (Europe, the United States and Canada) and CYTED (South America and the Iberian Peninsula). The reserves are all managed by national or local authorities. UNESCO's main job is to run the network linking them.



NO INFORMATION = NO PARTICIPATION

For Nydia Rodriguez, communication is the key to getting rural populations involved in the conservation and development of biosphere reserves.

Nydia Rodriguez juggles her time between explaining conservation to journalists and students in Costa Rica's cosmopolitan capital and teaching communications to the indigenous peoples who live in this country's southern Talamanca Mountains.

This feisty 44-year-old mother of three is a chemist turned environmental activist. She is president of Costa Rica's Man and the Biosphere Committee and on the staff of the Iriria Tsochok Foundation, a private, non-profit group defending the rights and resources of Talamanca's residents.

"I am a militant of my own ideas," Rodriguez says. "People should have access to communication."

After graduating in 1973, Rodriguez spent five years teaching chemistry. She then switched to state television where she produced science and education documentaries. After broadcasting a few programmes on national parks, Rodriguez says she developed a keen interest in the environment.

A decade later, Rodriguez began working in social communications for the Ministry of Culture. In January 1990, Conservation International, a non-profit private environmental group based in the United States, hired her to involve the inhabitants in the management of the La Amistad Biosphere Reserve.

NO-ONE THOUGHT ...

La Amistad's 612,000 hectares of tropical forest and glacial lakes nestled in the Talamanca Mountains were designated a UNESCO biosphere reserve in 1982. But it took more than seven years of administrative snags before the government finally sought the participation of its residents, mostly Bribri and Cabecar peoples. "No one ever thought of consulting the community," Rodriguez says. This became her assignment.

The indigenous and campesino farmers who live in Talamanca's villages, "had heard about the biosphere reserve, but they didn't understand what it was," she says.

For centuries, the Bribri and Cabecar peoples have found refuge along these slopes that border the Pacific and Atlantic Oceans. They have protected large portions

of the forest as sanctuaries, permitting the natural regeneration of plants and animals. Ancient tombs, petroglyphs and stone columns are a testimony to the culture that evolved here and that led to this region's designation as a UNESCO World Heritage Site in 1990. But outside commercial interests hungry to explore for gold and coal, to plant banana, pineapple and coffee trees

themselves to protect their interests. In March 1992, they established the Iriria Tsochok Foundation, for defence of the earth in Bribri, and hired Rodriguez to promote the reserve's conservation and development.

Rodriguez began writing leaflets, designing charts and organizing more meetings throughout the reserve. She also held a series of workshops training the population to produce radio programmes. Now they broadcast their own half-hour news programme called Sabak Burake, or the sound of the drum in Bribri, twice weekly.

For the rest of Costa Rica's population, Rodriguez focuses on the national media based in San Jose, the capital. She organizes seminars for journalists and invites scientists and other experts to explain the biosphere reserve to them. "I encourage them to cover environmental issues in a sensitive and educational way and to learn from and include the views of the people living in the affected areas," she says.

In addition, Rodriguez produces educational materials for schools throughout the country. "They need to understand that Talamanca embodies both the cultural and natural heritages of Costa Rica," she says.

Internationally, Rodriguez exchanges information with foreign environmental organizations, indigenous peoples groups and other biosphere reserves. The Spanish-language Talamanca bulletin is distributed to readers in Costa Rica and abroad.

Several government agencies now manage La Amistad but the foundation and the residents make themselves heard, Rodriguez says.

In 1991 for instance they blocked a proposal to explore the region for copper, arguing that the international mining company behind the bid had a very poor environmental track record.

"Information is basic," Rodriguez says. "If you don't have information, you don't have access. If a project fails, it is a failure of communication. Now they (local residents) know what to do and how to do it. They are no longer afraid to express their opinions."

Constanza MONTAÑA

or to build hydro-electric stations were threatening these time-tested strategies.

Rodriguez's first tactic was to hold a series of meetings in the Talamanca villages. She then developed slide presentations and other audio visuals not only meant to explain the biosphere reserve but also to motivate the residents to attend these community gatherings.

In June 1990, the community perspective was included in La Amistad's formal management plan, and three indigenous representatives were named to the reserve's coordinating commission.

But a year later, the National Park Service decided to focus on conservation in core areas and not in the reserve's inhabited districts, Rodriguez says. The government disbanded the commission.

As a result, 14 members of the indigenous communities decided to organize

TIGHTENING THE LOOP HOLES

Local farmers, nomads and experts are looking for new ways to live in and preserve Mali's Baoulé Loop. The stakes are high given the richness of the environment and the poverty of the people.

Hamadi Boly's hut made out of palmyra palm leaves stands beside the dry bed of the Kénie river, which forms the eastern boundary of one of the three wildlife reserves of the Boucle de Baoulé (Baoulé Loop) National Park. The park and its three reserves, 100 km from the Malian capital of Bamako, comprise the Baoulé Loop Biosphere Reserve, which covers an area of 511,060 hectares.

Hamadi came here from Djoumara, a town some 95 km to the north. With his wife, two children and three brothers, he roamed the woods for months, living off dairy products and whatever they could gather, while their herd of 300 animals fed off acacia leaves.

For the Boly family, as for thousands of other Peul nomads, the trek south usually starts in October with the dry season, explains Clément Traoré, a local official involved in the upkeep of the Park and its reserves.

MILK FOR MILLET

Sometimes the Peuls and the Moors wait at the Loop entrance for months to avoid damaging the crops. Usually, they only settle on the land there after the harvest, assembling on the outskirts of the 194 farming villages and hamlets in the reserve. They put up shacks made of sticks and branches and sleep on mats woven with palmyra palm fronds and kapok-stuffed pillows. Nature provides everything the nomads need. For food, they rely on barter and "fertiliser agreements" with peasants, exchanging milk for millet or peanuts.

But these long-standing good relations are threatened by the damage the cattle sometimes do to the crops, especially when lack of rain forces the herdsmen down to the Loop. Also, the nomads, who hate when even one of their animals finishes in the cooking pot, earn a bit extra by poaching. The farmers do it too. But the most damage is done by hunters coming from the towns or by teams of semi-professionals.

When the nomads start going back north in May, says Traoré, the forest and its wildlife come under extra pressure. The women make mats, curtains and beds for their daughters' dowries, made from rare

plants and trees. The young nomads stock up with hay, meat, game and acacia leaves for cattle feed.

"Any nomad worth his salt has to return at the head of a hundred or so mules heavily laden with things from the forest," he says, pointing to the hacked-at trees which line the pathways. A couple of swings of a machete and the half-felled tree's green leaves are in the herd's reach.

PARTICIPATORY CONTRACTS

"Nomadism and poaching are our main worry because it means there isn't much space or food left for animals," says Ibrahima Niang, a United Nations volunteer. Niang runs a project launched in May 1993 by the Malian government, financed by the UNDP with technical help from UNESCO.

The scheme, "Improved Management of the Bio-diversity of the Baoulé Loop Reserve," aims to renovate the reserve through "participatory contracts" with its 50,000 inhabitants. With their agreement, the boundaries of the reserve have been altered to give each village rights to occupy

never let anyone stand between me and the river and even less will I allow anyone to work the river-bed. It's because of frenzied over-use that the river dried up."

The same attitude is found in the village of Samakoulou. Its 500 inhabitants have neither clinic nor water pump, and the closest school is 25 km away. Nonetheless Samakoulou wins the prize for looking after the environment. The villagers report regularly to forest rangers about the activities of poachers and sometimes take energetic steps against them.

Samakoulou also supplied the largest group of volunteer hunters in October for training on how to inventory wildlife. The aim was to get villagers involved in preserving endangered species. The Fina Reserve was divided into three zones with iron fences, says Traoré. But before long, the fences were stolen and turned into cooking pots.

This story is at the crux of the conservation problem in the Loop: how can the environment be saved when the people living in it are so poor? The answer seems to lie in building infrastructure. But that

clearly-marked land outside the areas set aside for rigorous conservation. To help make nomadic cattle-raising "less disorganized", three zones have been designated for herd use with mixed areas for farming and livestock also set aside.

A few weeks ago, some farmers looking for land turned up on "our space", says Lamine Touré, who lives in Touréboogo. "We asked them to move on," he said. "I'll

would put the villages on the fast track to "civilisation", risking destruction of the forest and its wildlife. But researchers haven't given up trying to come up with alternative arrangements. The future of this rich and endangered environment will depend on the solution they plump for.

Abdoulaye TRAORE
Malian News Agency

COUNTING SHEEP

Soaring numbers of sheep are wreaking environmental havoc in the Pozuelos Lake Basin where experts are trying to limit the flocks without jeopardizing the economic health of the shepherds.

The Pozuelos Lake Basin is high in the central Andes, 3,400-4,600 metres up, in the northern Argentine province of Jujuy, on the border with Bolivia. The climate is harsh: in some years, a difference of 30°C between a summer day and a winter night.

The 400,000-hectare basin is a picturebook setting surrounded by blue mountains. At its centre, a lake feeds a rich typically Andean ecosystem. The vegetation is mainly trees and bushes such as quinoa, tola and churqui. Wild animals like vicunas, pumas, armadillos and prairie hares roam. But Pozuelos' main attraction is its numerous birds - flamingos, ducks, teal, condors, nandous, mountain gulls, curlews and many others.

Despite the difficult climate and conditions, some 3,500 people inhabit the basin, living off animals (llamas, sheep, goats and cattle) and natural resources, since tilling the soil is not very practical. Families earn only about \$1,200 a year. *"In such arid, marginal expanses, people live at the edge of what's possible,"* says John Celecia of UNESCO's Division of Ecological Sciences. *"It's a bit like the Himalayas or the High Atlas mountains."*

The basin became a UNESCO biosphere reserve in 1990 and was put on the List of Wetlands of International Importance two years later. Since then, scientists and managers have been studying the basin's tough problems.

ALWAYS EATING

First of all, there is overgrazing caused mainly by sheep which never seem to stop eating. Always moving, they damage the soil, speeding up erosion. The reserve is also paying to some extent for past mistakes. A scheme started in the 1960s introduced new breeds of sheep and varieties of grass so as to boost productivity and thus the income of local people. The plan had some good results, but the number of sheep soared. Today, says Rodolfo Tecchi, of the Jujuy National University, *"there is an average of two sheep per hectare in the reserve, twice as many as it can support"*. The reserve's managers are looking for alternative solutions like breeding alpacas. Scientists have drawn on Incan traditions in trying to reintroduce them and improve

strains by selective breeding. But, the present flock, of only average quality, does not produce good enough wool. Fenced off pastures might ease the sheep's assault on vegetation and soil. But, the residents are not keen on spending what little money they have on kilometres of barbed wire. Deforestation is the second biggest problem. Quinoa trees - genetic reservoirs in

well adapted to the local climate," he says. *"They have been improved and used to put up public buildings, like schools, town halls and even churches."*

Another pilot scheme aims to educate people about the environment and stimulate community participation. In 1994, children and their teachers from the towns of Pozuelos and Lagunillas, with the help of

themselves - and tolares are the first to suffer from local and regional fuel needs.

Faced with these environmental restrictions, some of the heads poor families living in the reserve leave to seek their fortunes in distant cities. But often times, they end up just swelling suburban slums, sending for their families with just the minimum needed to survive.

So the job of CODEPO, which runs the reserve, is not easy. It must encourage production to head off short-term emigration, while preserving the natural wealth of Pozuelos which is the basis of the region's long-term development. CODEPO - whose members are elected by the population, local towns, the provincial government, Jujuy University, national parks and NGOs - is trying to improve livestock breeding and marketing of animal products.

Another plan aims to revive traditional methods for building with unbaked earth (adobe). *"This is a first for a biosphere,"* says Celecia, noting that it also creates jobs and saves trees from being chopped down for construction. *"The adobe and the style of the houses, with their tiny openings, are*

some shepherd families, made an inventory of the reserve's biodiversity in a selected area. The university is now building the Pozuelos Scientific Station to provide research, architectural solutions and methods suitable for the highland conditions. Other projects aim to develop ecological tourism and study the more than 10,000-strong flamingo colony.

It cannot yet be said that the Pozuelos Basin has regained its balance. The scientists and researchers involved with the reserve sometimes have trouble getting their ideas across to the local population which tends to be evasive with their traditional forms of communication. Disputes between big landowners - intent on keeping their privileges, often with economic and political backing from outside the region - and small-scale livestock breeders do not help matters. But an "ecological-cultural" awareness is growing at Pozuelos - one which must be nurtured by the patience and determination of the people living there.

S.B. and Pedro Raul NORO
San Salvador de Jujuy (Argentino)

HUMOUR

HUMOUR

THE BUILDING PRESSURE

Looking to escape the stress of Jakarta, city dwellers are flocking around Cibodas - sending land prices skyrocketing and flooding the reserve with tourists.

Indonesia's Cibodas Biosphere Reserve is fast becoming a playground for the populace of Jakarta, the national capital only 60 km away. The twin mountains that form the focus of the reserve create a backdrop that has brought widespread development of holiday accommodation, a host of tourists and an industry to support them.

More than a century old, Cibodas was the first nature reserve in the then Dutch East Indies, and one of the first in the world. It and its surrounding buffer zones were declared a biosphere reserve in 1990, with the Gede Pangrango National Park as the core protection area. Within the boundaries of the core area can be found half of the bird species on the island of Java, and a range of biological ecosystems as altitude increases to the alpine environment around the peaks. The park is also an important water catchment for the surrounding areas, including Jakarta.

CONCEPT TO REALITY

Simply changing the name of the park to a biosphere reserve though didn't bring overnight awareness of the need for conservation. Park staff face a number of problems in transforming the concept into a reality - getting the local population actively involved in the area's protection and sustainable development. These can be summed up as a shortage of trained personnel, a lack of baseline information on the park, and people pressure on its resources. Funding is also in short supply.

"This restricts the vital work of spreading the reserve's message," says Edi Sansudi, head of the park's utilization programme. *"Many of the people who live within the reserve have no idea that it is supposed to be something more than just a park."*

A big part of the problem in involving the local people is the rapid development taking place in the region, which is changing the face of its population. Rich Jakartans, seeking an escape from city stress, are offering good money for land around the park to build weekend homes. A golf course has been built along the reserve's most visited edge, ironically providing *"a great buffer zone,"* laughs Sansudi. As a result, land prices have skyrocketed. On the edge of the reserve, one

square metre of land now fetches nearly \$50, a large sum for the local farmers, who are selling up and moving out.

Then, there is the weekend influx of tourists - at the moment 60,000 a year, 90% of whom are Indonesian - packing the vegetable market filled with fruit sellers, photographers with polaroid cameras, kids selling wild strawberries, beggars and people operating food stalls. A few men *"help"* with parking inside the reserve, in the hope of earning a few coins.

This growth has radically changed land use patterns and undoubtedly opened up opportunities for the local residents, although perhaps not in the way that the biosphere reserve management had hoped.

man who is carrying firewood back from the forest, says local people are allowed to collect wood, as long as they don't take any large pieces of timber. Park officials confirm that part of the buffer zone is run by the forestry department as a *"people's forest"* and that co-operative associations of woodcutters are allowed to take fallen timber.

LESS OBVIOUS CHARMS

Expert opinion is that while Cibodas may not have yet achieved anywhere near the goal set for it by the founders of the biosphere concept, it has made progress and the future looks promising. German researcher Martha Klein, who has just begun studying the application of the concept at Cibodas, says she is impressed by the reserve staff: *"They are very serious, very motivated,"* she says. *"They want to see change."* She is also impressed by plans to try to widen the involvement of tourists when they visit the reserve, so that instead of heading straight for the peaks, they spend time learning about some of its less obvious charms.

Keith Harris, a British volunteer who has been working on environmental education in the park for nearly two years and is the author of the first information booklet, sees progress in cooperation with local authorities, especially schools.

However, the proximity of Cibodas to Jakarta and other urban centres presents unusual threats, he adds. *"This park is obviously not in a purely rural setting. There are not so many problems of people stealing things, the problem is more one of urbanisation."*

For Klein, there is also the question of numbers. What happens when the number of visitors explodes? Already growing by up to 20% a year, this would have a potentially serious impact on some areas within the core zone. The spirit of the Cibodas staff, now focused on working with villagers who have always lived on the park's boundaries, might well be put to the test as the pressures from urban Indonesia continue to build.

For those communities maintaining a traditional lifestyle, the reserve remains an important resource. It's with these people that the park authorities tend to work most closely - not only are they easier to reach, but they have a real stake in the reserve's environmental well-being. The edges of the park provide grass to slash for their livestock. Rachmad, a wizened middle-aged

Dewi PUDYANTI LOVEARD
Jakarta (Indonesia)

OUR OWN BACKYARD

The farmers from the Fitzgerald Biosphere Reserve have understood that succeeding in the harsh environment means pulling together and looking after it.

To the outsider, the one million hectare Fitzgerald River Biosphere Reserve on Western Australia's southern coastline could appear as an ecological disaster waiting to happen: a zone of wonderfully varied plant and animal life surrounded by cleared farming land that is subject to drought, erosion, and soil and river salination.

This could well be the case were it not for the fact that this special place has been adopted by the local people who make their living farming the reserve's "area of co-operation", the land surrounding the Fitzgerald River National Park - the reserve's protected 242,000 hectare core.

Ultimate responsibility for the park lies with the WA Government's Conservation and Land Management Department (CALM). However, says acting Reserve Director Ian Herford, its successful protection and development is largely due to the fact that the local population has become involved in the reserve's day-to-day organization and management. "In the park - or core area - the locals work with the rangers as volunteers doing just about anything - from rehabilitation work to road stabilisation and recreation site maintenance," he says.

RESPONSIBILITY

The people who live off the land surrounding the park have developed a sense of ownership and responsibility for the site: "they see it as their own backyard" says Head Ranger Nathan McQuoid. They also understand that the research carried out there, providing a better understanding of how the local ecological system works, can help them resolve some of the major land management problems they face on their farms.

"There are three major threats to the core zone," explains ecologist Angela Sanders who has been instrumental in raising public awareness and involvement. "The first of these is dieback, a fungal disease that destroys native Australian trees, then there is visitor use, and thirdly, the impact of rivers running through the cleared farming and grazing land where their salinity dramatically increases, and draining into the park."

Dieback has forced the closure of a large central zone of the park, which initially angered the users. But "now the groups have got together and have their own environmental officers" who actually guard the closed areas against intrusion says McQuoid. Scientists working on the

programme which will be run by the farmers within the catchment zone, the Jerramungup Land Conservation and Development Committee and two nearby schools," explains Sanders.

Schoolchildren are also helping out on another project, supported by UNESCO, to draw up an inventory of the wildlife in the reserve.

SUSTAINABILITY MEANS ...

The 2,800 or so people living around the reserve are well aware that their farming activities have a damaging effect on the core area in the park, said McQuoid, and that correcting this could also help them solve their own landcare problems and ensure the sustainability of the farms.

"Our top priority is to get the farm soil conservation right," he said. Thus, farmers in the zone of cooperation are now working to control water catchment, protect remnant vegetation and plant trees. They are also planting deep rooted crops and using minimum tillage cultivation. The hard lessons learned from regular and long periods of drought accompanied by severe erosion, have made them realize that to farm any other way would be to tempt disaster.

Trying to ensure a living in such harsh and fragile conditions has made the farmer of the 90s "hungry for information and eager to work with scientists doing research in the area, wherever possible," said Fitzgerald River Biosphere Project Chairman Bill Lullfitz. "There is a constant flow of scientists who come to visit the area. We like to make sure that someone meets them when they come and that there is an exchange of information."

"One of our hates is scientists who come and do research and then leave with their data without letting us know anything about it." This robs not only the farmers, but means their knowledge is also under utilised.

At Fitzgerald, necessity has not only been the mother of invention, but has also given rise to cooperative partnership that serves as a model of its kind.

Mark FLETCHER
Esperance, W. Australia

STUMPED

With logging, air pollution and a tense political climate, forestry protection is an uphill struggle in the Southern Appalachians - a region known for its history of environmental cooperation and conflict.

Mount Mitchell used to be known as 'Black Dome' for its dense cover of virgin evergreens. It's now, to quote the venerable Encyclopaedia Britannica, "a ghost forest of dead trees". Acid rain and air pollution have deepened the scars left by environmental mismanagement in one of the world's most biologically diverse temperate forest regions - the Southern Appalachian Mountains in the United States.

Ironically, the region is considered a model of cooperation for sustainable development with the Southern Appalachian Man and Biosphere (SAMAB) programme's five reserves and a zone of co-operation spanning 13.4 million hectares across six states and a population of three

million. Not everyone is so thrilled with the seating arrangements. "We're doing what those agencies talk about doing," says Hugh Morton, the only man in the world to have his own private biosphere reserve, Grandfather Mountain, the highest of the Blue Ridge Mountains. In 1952, he transformed the land, which has been in his family for more than a century, into a "travel attraction" complete with 48 km of hiking trails, a swinging bridge and a museum for the some 250,000 visitors per year. "We must have been doing something right," says Morton. Two years ago, the site was recognized as a biosphere reserve.

"Being a reserve gives us credibility and a lot of bragging rights," says Morton.

convince everyone involved of the need for eco-system management. This voluntary cooperation is the cornerstone of the programme and, says Hinote, the most realistic approach given the political climate in the US. "Since the last election, there is a real strong reaction against anything that encroaches on private land owners. So through meetings and symposiums, we're trying to convince people that it's in their best interest to preserve the environment."

A "COZY RELATIONSHIP"

Without getting into a private property debate, SAMAB could focus more on public agencies, insists Nicole Hayler of the Chattooga River Watershed Coalition of non-profit groups in the Carolinas and Georgia. Hayler says the watershed is threatened by siltation from intensive forestry practices. With 69% of the land publicly owned, logging is primarily determined by the "National Environment Pact" which she says is a contradiction in terms. "We've got clear-cuts in dressed up language. They authorize 'c-tree' and group selection which can mean only five trees left standing per acre. Or they cultivate an area for just a few commercial species, applying herbicide to kill competing vegetation." Besides the initial damage and eyesore, there are cumulative effects which, Hayler says, are not sufficiently understood. This is where SAMAB and the Forest Service come in with a series of studies through the "Demonstration Project".

"We applaud these steps and definitely support the SAMAB concept in bringing industry and citizens together. But I don't think that everyone's under the same so-called roof." She points to the "cozy relationship" between the timber industry and Congress which exerts strong influence on timber targets. All of which leads Hayler to insist on "a more forceful approach - its time to take the research we have and apply it. We cannot continue to say 'Oh! Don't get involved because that's an advocacy issue and we'd have to take sides.' Maybe SAMAB can't take such a stand," she says. "I guess that's where we come in."

A.O. and Richard GREEN
Getlinberg, TN (USA)

million. Intended to strike a balance between development and environmental protection, SAMAB was born out of economic necessity when, in 1988, six government agencies - from the Forest Service to the Oak Ridge National Laboratory (a nuclear and uranium enrichment facility) - were faced with a budget-slashing Congress. By working together, the agencies figured they could pool their resources and reduce overlap in their projects. Easier said than done. Friction arose as each agency had its own interests and "turf" to protect. But for Hubert Hinote, SAMAB Executive Director, conflict is essential for a viable plan for sustainable development. Just getting representatives from industry, conservation groups, state and federal agencies to sit at the same table is a victory in itself.

"I'm on a committee about air pollution which is giving us problems with our high-elevation spruce fir forest." But Morton hasn't "bothered" attending too many meetings of the SAMAB consortium bringing representatives from industry, utilities and citizens groups together to recommend by 1997 ways of improving the air quality.

"SAMAB thinks that bringing in all those polluters is the thing to do. But they're the ones snarlin' up the meetings," says Morton. "You talk about air pollution and the Tennessee Valley Authority (electricity utility) says, 'what pollution?'. They're still using high-sulphur coal which we know is causing problems."

But, as Hinote asks, "how can you pass regulations without the research?" By monitoring conditions, SAMAB aims to

BIODIVERSITY ...

Where do genetic resources come from ?

The earth and the work of human hands...

Genetic resources and the origin of agriculture

By spreading livestock across up to the high, the first farmers increased the diversity of domesticated as well as the number of species in certain areas. The selection and crossbreeding of animals and plants greatly enriched genetic diversity among these species, both wild and cultivated. The migration of people and the migration of genes from one continent to another favoured the mixing of genes, creating new forms and enlarging the gene pool of each continent.

The five maps of the centres of origin of cultivated plants were created in 1945, based on the work of Nikolai Vavilov. His work was continued by Jack Harlan, who distinguished three centres where agriculture appeared and three vast regions across which it spread as climates improved in the Quaternary.

For many of the most important species we use, this map gives an indication of their origin, centres and regions that contain the greatest genetic diversity, particularly in terms of the major world crops and their wild relatives.

Centres of origin and regions of diffusion of agriculture, according to Jack Harlan

Wheat	Rice	Maize	Yam
Sorghum	Millet	Cotton	Tea
Apple	Banana	Orange	Coconut
Guava	Jackfruit	Jackfruit	Jackfruit
Jackfruit	Jackfruit	Jackfruit	Jackfruit

Our global dependence

Knowing the thousands of plant and animal species that have been domesticated, we can see that the genetic resources of the world are being used in a very limited way. The genetic resources of the world are being used in a very limited way. The genetic resources of the world are being used in a very limited way.

Our local dependence

At the local level, the genetic resources of the world are being used in a very limited way. The genetic resources of the world are being used in a very limited way. The genetic resources of the world are being used in a very limited way.

Agriculture appeared at about the same time in several regions close to the refuges from the last glaciation. These also, veritable libraries of biodiversity, are irreplaceable stores of the world's genetic resources on which we depend for our food, health and an increasing proportion of our industries.

UNESCO
BIODIVERSITY IN QUESTIONS
MOB

... AT A GLANCE

- A series of 12 - 15 wallcharts explaining the hows and whys of biodiversity is under preparation by UNESCO.
- The first three charts in the series are now available in French and English.

☛ Division of Ecological Sciences, UNESCO, 7 place de Fontenoy, 75352 Paris 07 SP, France.

PUTTING PEACE BACK TOGETHER

At Tignes, a resort in the French Alps, 600 skiers slalomed down a trail 4.3 km long but only 1000 metres high. "A THOUSAND CURVES" was organized 21 April as part of UNESCO's International Fund for the Development of Physical Education and Sports. The aim was not to



CROSSING THE FINISH LINE
(Photo UNESCO/A. Gillette).

win but to raise funds (about 15,000 FF) to provide sports equipment for young people in Ethiopia's capital Addis Ababa which, like Tignes, has an altitude of 2,500 metres.

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The highway surrounding Greater Cairo will pass "to the north of the **PYRAMIDS WORLD HERITAGE SITE**, avoiding any type of crossing of the plateau." A joint statement released 5 April by Egyptian authorities and a UNESCO expert mission specifically stated that the government has accepted UNESCO's proposal to divert the "ring road" (see Sources, No. 67). This decision came after intense negotiations resolving what was considered to be the most serious threat to the last surviving example of the "Seven Wonders of the World."

The "PROVISIONAL DIRECTORY OF SOCIAL SCIENCE INSTITUTIONS in Central and Eastern Europe", listing 387 institutions from 27 countries, is now available on request through the Social and Human Sciences Documentation Centre in either book form or CD-ROM.

UNESCO SOURCES

Somali's armed factions left their insignia at the door of a meeting in Sana'a while trying to find ways to reconstruct their country.

Will Somalia ever know peace? Only if Somalis want it and work to build it themselves. Everyone seems to agree on that.

"Since the United Nations pulled out last March," says Sigurd Illing, the European Union's special envoy for Somalia and head of the Somalia Aid Coordination Body (a Nairobi-based donor group), "the future of Somalia has been in the hands of its people. The international community can of course give plenty of support but it can't take the place of Somali decision-makers. Peace isn't just a matter for the political leaders either. All sectors of society must have their say."

One of the founders of independent Somalia, Abdirizak Haji Hussein, who was prime minister back in the 1960s and then ambassador to the United Nations, says "the international community can help and encourage us but it can't solve our problems. It's up to us to understand that only peace and reconciliation can end the steady destruction of our country."

Peace is impossible in Somalia without internal reconciliation, which led UNESCO to extend its "culture of peace" programme to the Horn of Africa and to organize a symposium on it in Sana'a, the Yemeni capital, from April 17-20. The programme has already been introduced into Mozambique, El Salvador and Congo.

THE "FAMILY SNAPSHOT"

Can Somalia make peace with itself? Are Somalis sufficiently worn out by war to declare peace like the Mozambicans and the Salvadorans? The "family snapshot" of 67 Somali leaders taken at the Sana'a gathering has already raised hope.

It took more than four years to get representatives of the armed factions around the same table at the Sana'a Sheraton, where they were asked to leave their insignia at reception and to forget their tribes for a few days. They were invited to talk as equals with a group of fellow citizens from inside and outside the country - religious leaders, women, elderly fathers of independence, young militants of all stripes, poets and engineers. Then there were also the intellectuals, the cream of the diaspora - scholars exiled in European and North American universities.

It took four days for suspicion - tribal, ideological or personal - to give way to feelings ranging from plain curiosity to the joy of reunion between cousins and friends separated by the war. Creating this atmosphere was perhaps the best thing about the get-together and certainly something quite a bit more concrete than discussions, which were not going to produce a miracle by themselves.

The burning question which loomed over the conference - how to break the political grip of the armed factions and their "culture of war" - was not on the agenda, which dealt with "Reconstructing Somali society... Restoring the state ... and Getting Somalia back into the international community."

Mohamed Nour, another wise old man from the days of "French" and "British" Somaliland and a fervent nationalist, put it bluntly: "All countries, especially poor ones, appeal to their intellectuals in the fight for freedom. You have to be mad to do what we've done, which is to shove aside those very Somalis who can best help us get out of our national tragedy."

The international community has something to do with this "Somali madness". "I don't think the UN intervention was a mistake," says Abdirizak Haji Hussein. "In fact I think it was very useful in the humanitarian sense." But we have to recognise that if the two stages of the UN operation (UNISOM) were a political failure, it's mainly because those who should've been kept out of the peace process were put bang in the middle of it.

Fortunately, no-one came to Sana'a to wring their hands over past mistakes. The ethnologist Mohamed Abdi, of the University of Besançon, in France, says "there's a national identity crisis at the root of the Somali tragedy, a sort of ethnic foul-up by the ruling class, a culture of hate and abuse which goes a long way back and which has produced the present warlords and their tribal ideology. One thing's for sure: those who've destroyed the country aren't the ones to build peace."

Rebuilding the Somali nation-state and bringing it back into the international community - these were the main issues in Sana'a. Unlike other African peoples torn

apart by civil war, the Somali nation has a big advantage - a common ethnic, religious and cultural identity, firmly rooted in Africa, the Arab world and Islam. "But Islam", says the jurist Mohamed Ragis, one of the country's few unarmed political leaders, "must be a source of tolerance, justice and dialogue."

Like a smashed pot, Somalia must carefully put the pieces back together. So the conference unanimously opted for a federal state whose constitution remains to be drafted. Federalism, the delegates said, would guarantee local democracy and also be the best way to defeat the unhealthy "national" ambitions of the warlords. It would also immediately legitimise of lo-

Another jurist, French-trained Kulmie Samantar, bravely remarked that "at a time when our neighbours are looking to economic and even political unity between all the peoples of the Horn of Africa, we Somalis, with our tribal wrangling, are a major obstacle to it. We've got to get together. Somali federalism only makes sense as the first step towards a regional federalism".

With the aim of transplanting the pragmatism and vision expressed at Sana'a to Somalia, the conference's final document lists several concrete and somewhat feasible objectives: disarmament, revenue generating activities, reinforcement of local administrations, education for peace and support for diverse citizens' associations such

cal leaderships who would guarantee peace and the reconstruction of their regions and communities. "Having legitimate regional authorities," said Illing of the European Union, "makes aid provision easier as well as helping to rebuild national state structures adapted to Somali conditions". This point is in the conference's final document, which says international aid "requires local or regional administrative partners which are non-partisan until such time as state partnerships become available".

Federalism seemed, in Sana'a, to become synonymous with pluralism. To the point that, throwing centuries of Somali-Ethiopian rivalry to the wind, the jurist Abdissalam Sheik Hussein, a former Somali justice and culture minister now exiled in the Arabian peninsula, hailed "the brave federal experiment under way in Ethiopia" as "a model for we Somalis".

The state must be rebuilt if Somalia is to return to the international community.

as women's groups, NGOs as well as professional, inter-tribal and intellectual organizations. The document ends by hoping that UNESCO - along with other international and regional bodies - will create a kind of permanent secretariat or some other way of following up the Sana'a meeting.

That remains to be seen. One of the conference achievements was two evenings of Somali culture and music starring Ahmed Nagi, the best-known and most popular Somali singer and a former director of the national theatre in Mogadishu. Several songs written by him pouring scorn on war and violence and praising the nationalist feelings which led Somalia's clans to fight for national independence, moved to tears men who until then had just glared at each other. That was on the day the conference opened. Unforgettable.

Pietro PETRUCCI
Sana'a (Yemen)

- The second extraordinary session of the Intergovernmental Committee of the **WORLD DECADE FOR CULTURAL DEVELOPMENT** (1988 - 1997) was held at headquarters from 3 to 7 April gathering 150 participants to review the plan of action going through to the decade's final year, 1997. This third phase, 1996-97, will focus on promoting and expanding upon the tools and methods previously devised with international institutions and member states to integrate cultural factors within development policy.

- ▼ More than 500 universities and about 5 million students around the world will be linked up through the network **FORUM-UNESCO/UNIVERSITY AND HERITAGE**. According to the agreement signed 19 April by Director-General Federico Mayor and Justo Nieto-Nieto, rector of the Polytechnic University of Valencia, the Forum is intended to train future specialists in heritage conservation. Based at this university, it will also serve to catalogue research papers and related work, coordinate available technical equipment in the field and promote exchanges between professors and students from the countries involved.

- At the "Asia-Pacific Regional Seminar on **INFORMATION TECHNOLOGY** for Newspaper Publishing" held in Madras (India) from 10 to 14 April, some 30 participants from 20 countries discussed ways in which small and large-sized newspapers might cooperate to improve the quality of coverage offered as well as the working conditions of their personnel. Technological advances were at the centre of discussions, notably, the computerized manipulation of Asian scripts. However, the participants stressed that wide use of this technology requires regional cooperation in developing standard scripts. Internet also raised interest as a cost-efficient way of gathering and verifying information.

• **"LIVING TOGETHER"** is the theme of the 1995 photo contest organized by the Asia/Pacific Cultural Centre for UNESCO in marking the Organization's 50th anniversary and the International Year



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of Tolerance. The entry deadline is 31 July. Amateurs and professionals are invited to submit photos vividly depicting the current situation of life and culture of people around the world. Selected works will be shown during a travelling exhibition.

ES* ACCU, 6 Kukuromachi, Shinjuku, Tokyo (Japan)

▼ Educational approaches to prevent **DRUG ABUSE** in Eastern and Central Europe was the theme of a meeting in Plovdiv (Bulgaria), 9 to 16 April, organized by UNESCO, the National Commission of Bulgaria and its Ministry of Education. Some 35 teachers, psychologists, police officers and other authorities stressed a preventative approach based on culturally-relevant education as opposed to "anti-drug" campaigns.



A NEW ALLIANCE

• **What role for the military in a world where the concept of national security is profoundly changing?**

This question was at the heart of a two-day symposium set up by UNESCO and the Organization of American States (OAS) over April 3-4 at the Inter-American Defense College (IADC) in Washington, DC, that explored what constitutes security in the post Cold War world. The IADC is a college for senior officers from North America, Latin America and the Caribbean that studies inter-American defense issues.

"Democracy is the only way to build peace," said Director-General Federico Mayor, in stressing to the military officers that UNESCO seeks to create "a new alliance" with them against "intolerance and violence. The biggest victory is not to win a war but to prevent one."

One of the key points of the symposium was that major threats to security now come from within countries in the form of illiteracy, poverty, joblessness, environmental degradation and social exclusion, which are in turn breeding grounds for crime, terrorism, drug-trafficking, and political radicalization. And the deep-rooted causes of social conflict do not lend themselves to military-solutions. Rwanda, Somalia and former Yugoslavia were often cited as examples of this.

A FRAGILE SAPLING

"If we do not look at security through the eyes of people, we will not solve the problem of security of societies," said Juan Somavia, Chile's Ambassador to the UN.

The security and stability of societies, Somavia said, had to be linked to the reduction of poverty, the creation of jobs and the redistribution of income, family stability, the promotion of social integration to achieve social equity, equal rights and full participation by all in the political process.

Democracy is still a fragile sapling in much of the Americas, where the relationship between the military and the civil society is very much in transition. And though it was not stated outright, the political indoctrination of the Latin American military on the importance of upholding democracy and accepting civilian authority was one of the symposium's main purposes.

The meeting did not directly address the questions of whether military budgets should be reduced. Instead the speakers

talked about seeking a better balance between spending on the armed forces and spending on social development and the need to develop new roles for the military more directly in economic and social programmes.

"We must clearly define the fields in which cooperation can be effective and sustainable," said Moufida Goucha, a special adviser to the Director-General, in recognition that any effort by UNESCO to elaborate a new concept of security must be done in agreement with the military.

For their part, the military talked about the specifics of peacekeeping operations and their proposals for making them more effective. The officers agreed with Somavia that poverty itself is a national security issue and that terrorism and drug trafficking are real threats.



SECURITY TODAY MEANS ATTACKING POVERTY AND THE LIKE, NOT THE NEIGHBOUR (Photo UNESCO/Patrice Fury).

UNESCO has embarked on a significant and necessary mission - one where in its role as the intellectual arm of the UN system, it will have a lot to offer just by bringing civil-military relations into the international arena and opening the way for a new, joint approach to the issue of global security.

Andrew RADOLPH
Washington, D.C., USA

LET THERE BE LIGHT!

Solar energy could solve the energy problems of Africa's rural populations - and help protect the environment.

Seventy five percent of Sub-Saharan Africa's population has no access to electricity. Energy sources are taken directly from the surrounding environment, and that usually means cutting down trees in regions that already suffer severe environmental degradation.

With energy consumption relatively low in rural areas, it is considered economically unwise to extend electricity supply to them. However, Sub-Saharan Africa's population is expected to double within the next 35 years, and most of this growth will take place in rural zones - already home to 70% of the continents' peoples.

"The energy crisis is a source of simmering discontent. It causes conflict with national leaders and the privileged classes - often fought with knives and guns," experts at meeting on solar energy in Africa (March 20-23) were told in Harare, Zimbabwe. The UNESCO organized meeting was part of the run up to next year's Solar Summit - also in Harare.

"We use the sun every day to help us see and to keep us warm, but it is largely forgotten when it comes to every day energy needs," said one of the African experts. "Few national policy makers are taking advantage of this unlimited and free source of energy that, unlike conventional fuels such as coal and oil, belongs to everybody."

A VIABLE ALTERNATIVE

Boris Berkovski, Director of UNESCO's Engineering and Technology Division, is convinced that solar energy is a viable alternative, especially in rural areas. It is not only cost competitive but also minimises environmental problems. Neither does it require expensive, elaborate infrastructure or highly skilled experts to operate it.

Zimbabwe is one of the few African countries that have embarked on projects to exploit the sun to provide energy in rural areas. The government, with the support of the United Nations Development Programme (UNDP), in 1993 launched a nine-million dollar five-year Global Environmental Facility (GEF) solar energy pilot project which will see 10,000 to 20,000 solar installations mounted in rural homes, schools and hospitals.

Under the project, rural people can either pay cash or apply for loans through the Agricultural Finance Corporation. GEF solar energy outreach advisor Godfrey Marawanyika told the meeting that nearly



SOLAR ENERGY: CHEAP, CLEAN AND EASY TO USE (Photo UNESCO/Paul Almasy).

1,000 people had already been granted loans while another 600 systems had been installed for cash-paying clients.

One of the beneficiaries of the project is 45-year old Joseph Chiripanyanga who now has electricity in his five-room house in the village of Mount Darwin, in remote north-eastern Zimbabwe.

Chiripanyanga, a peasant tobacco farmer and father of seven, said solar energy was helping him to save "up to Zimdollars 600 (US\$ 75) a year (a substantial amount by rural Zimbabwean standards). I am now able to grade my tobacco in the cool of the night using light from the solar system," he said. "And, I no longer need to buy batteries for my radio and television."

As one expert summed up: "Clearly, solar energy would be a plus for everybody. It is clean, it is available, it is relatively simple, and it is unlimited. It can change everybody's lives. All governments need to do is act."

Ndaba NYONI
Harare

• **"THE SPREEWALD BIOSPHERE RESERVE** - Yesterday, Today and Tomorrow" was the theme of an exhibit at UNESCO, from 2 to 7 April, put together by students and their teachers at eight schools in Lubbenau city (Germany). Photographs, texts and models of the village architecture made by the students, along with local crafts were presented to enable young people to discover and better understand this vast glacial valley between Berlin and Dresden and the broader relations between people and the environment.

▼ **"CULTURE AND AGRICULTURE"** is the 1995 theme of the World Decade for Cultural Development (1988 - 1997) and title of a recently released booklet. Based on the experiences of inter-governmental organizations, notably the Food and Agriculture Organization, the booklet's 12 articles analyse past projects in trying to infuse agricultural development policies with a healthy respect for cultural practices. From educational comic strips to sacred groves, a wide range of tactics is offered to enable local communities to take an active part in development projects.

• World Decade Secretariat, UNESCO.

• Education, health, trade and commerce as well as regional and international cooperation could all be greatly improved by enhancing Africa's telematics infrastructure - an investment costing less than the price of a modern jet fighter. This was one of the observations made at the regional symposium on **TELEMATICS FOR DEVELOPMENT**, held at Addis Ababa (Ethiopia), 3 to 7 April. Some 250 policy makers, mail and telecommunications officials, NGOs, manufacturers, users and donors stressed the need that African countries be fully involved in the information revolution to prevent the further marginalization of the continent.

HOME AGAIN

• **"ETERNAL EGYPT - 6000 Years of History"** was the theme of a week-long series of events celebrating Egypt's cultural heritage which was organized at UNESCO, 24 to 31 March. Archaeologists,



ABU SIMBEL (Photo UNESCO/Dominique Rogier).

museum curators, Egyptologists and artists presented some of the better known aspects of Egyptian history such as the Pharaohs' heritage while also exploring the city of Alexandria, a principal locus of Hellenistic civilisation. Special exhibitions highlighted Egyptian museums, the work of the first translator of Egyptian hieroglyphics, Jean-François Champollion, as well as contemporary arts and crafts. The Cairo Opera also gave a folk music concert.

▼
"The more we talk about peace, the more violence there is. What can UNESCO do? This is what we are concentrating on," said Baba Akhib Haidara, one of 12 members of the Advisory Committee on **EDUCATION FOR PEACE**, Human Rights and Democracy which held its first meeting at headquarters from 19 to 21 April. Representatives from some 40 Permanent Delegations, international organizations and NGOs also attended to help identify UNESCO's priority tasks and find ways of getting national authorities more involved in promoting this education, notably, by developing course materials.



Cambodian "heritage police" recover a cache of stolen treasure from Angkor.

The tide is turning at Angkor in Cambodia, with the capture and safe return of 108 stolen temple relics by members of a UNESCO and French trained "Heritage Police" unit.

The 450-member unit recovered the objects and arrested 56 people between 15 December 1994 and 10 March this year, according to a report by the French Police International Technical Cooperation Service (SCTIP). It was submitted to a meeting of the International Coordinating Committee for the Safeguard and Development of Angkor, held in Phnom Penh on 31 March.

Khamliene Nhouvanisvong, Director of UNESCO's Phnom Penh office attributed the success to a major surveillance operation mounted by the unit at key points around Angkor. *"This involved covering some 40,000 hectares of often difficult*



STATUES HAVE BEEN DECAPITATED FOR A BOWL OF RICE (Photo UNESCO).

terrain," he said. *"The smugglers were typically arrested in groups of three or four in direct possession of objects worth perhaps tens of thousands of dollars on the international art market."*

The recovery of so many pieces marks a stunning breakthrough for the Organization's safeguarding and public awareness programmes concerning the site, which has

been pillaged to the point of its inclusion in the "endangered" category on the World Heritage List.

Angkor (meaning "Capitol") was once the administrative and religious centre of a vast South Asian empire extending from the Bay of Bengal to southern Viet Nam and central Laos. Hundreds of its relics have been stolen or defaced since the overthrow of the Khmer Rouge in 1979.

HEADS AND TORSOS

Thieves use chainsaws or crude chisels to hack the heads off 800 year-old statues, sometimes in exchange for a bowl of rice. Many of the plundered artifacts have found their way onto major art markets, including an 11th century torso of the goddess Khmer sold in 1992 at Sotheby's for \$63,250 and a tenth century head of Siva, now on display at the Metropolitan Museum of Art in New York.

Funded by France, the "heritage police" unit was set up last year with some 500 members. These policemen have received special training and equipment, including motorbikes, lights, weapons and radios. A central office for the unit, as well as an Interpol office have also been set up to coordinate operations and related information.

This is but one of a range of activities supported by UNESCO to stem the thefts and protect the site. With funds from Japan, France and Luxembourg, for example, the Organization has restored the Angkor Conservation Office, a bomb-proof safe-house used to store hundreds of the most valuable temple relics. It has also been involved in preparing national draft legislation for cultural heritage preservation as well as developing related courses, manuals and textbooks for students from primary school to university and producing television programmes on the topic. With the International Council of Museums, UNESCO published the book, *"100 Missing Objects: Looting at Angkor"* in 1993. Since then, four of the most valuable objects have been voluntarily returned, while negotiations continue for several others.

These efforts, backed by the Cambodian government and customs officials, are clearly starting to pay dividends.

OPPORTUNITIES FOR THEFT

Irak has become a virtual gold mine for traffickers of stolen artefacts which has a team of experts alarmed and frustrated.

The looting of museums and archaeological sites in Iraq is "a genuine tragedy because the items stolen will probably never be recovered and returned," says Lyndel Prott, head of the International Standards section in UNESCO's Cultural Heritage Division.

According to officials in Baghdad and an international group of independent researchers in archaeology, architecture, philology and art history which reported to UNESCO, nearly 4,000 items have been stolen from museums outside the capital since 1991 - mainly during disturbances in the country's Shiite and Kurdish areas at the end of the Gulf War.

The items are mostly ivory figurines, cuneiform-inscribed clay tablets and hundreds of gold and silver pieces. "They're extremely important for researchers because they help trace the evolution of the Assyrian, Babylonian, Persian, Islamic and other civilisations which in turn ruled Mesopotamia," says Prott. "Their market value is often much less than their cultural value."

INSTABILITY AND CRISIS

The researchers also reported that parts of statues and bas relief sculptures were still being pilfered from Hatra (inscribed on the World Heritage List), Nimrud and other places. "When a country goes through a period of instability and economic crisis, the state is unable to look after cultural matters such as these," says Prott. "People trying to improve their daily lives by any means take advantage of the situation to loot the sites. We've seen it in Lebanon, Cambodia, Eastern Europe and, more recently, in Afghanistan and Yemen."

There are plenty of opportunities for such theft in Iraq, which has been under international sanctions since 1991, because it has more than 10,000 known archaeological sites and the budget and staff of the government's antiquities service greatly diminished after the war. Items from Iraq easily make their way to Western auction rooms and art dealers, probably via neighbouring countries like Saudi Arabia and Jordan. This is why the researchers have

appealed to UNESCO to stop the smuggling and sale of stolen artefacts.

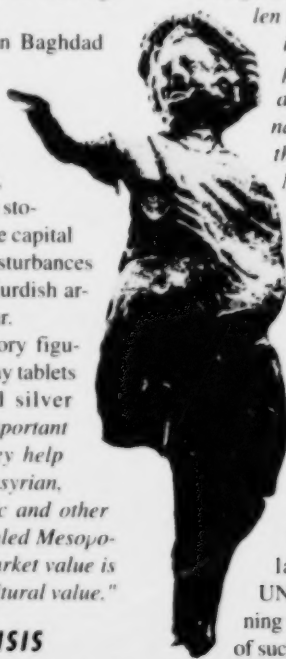
Prott regrets however that "the information we have and the four catalogues we got from the Iraqi authorities don't include enough details and photos of the stolen items to enable us to legally identify them. But we've passed the information on anyway to Interpol, the International Council of Museums, the New York Metropolitan Museum, Sotheby's in London and the International Foundation for Art Research. We're also putting together a shorter list of items which will be more widely distributed."

Another problem is that, except for the United States, none of the countries with the main markets for artefacts (Britain, Switzerland, Japan, France, Germany and Holland) have signed the UNESCO convention on banning the import, export or transfer of such cultural property.

"They are reluctant to sign," says Prott, "because their art dealers claim a ban would affect business and lower their income. Since the Second World War, there's been very strong political pressure to liberalise trade. Even in the fight against smuggling drugs, arms, currency and people, governments prefer to use local informers and infiltrate networks rather than stop up border controls."

So the chances of finding and returning the stolen artefacts to Iraq seem slim. "Even Interpol, with the world's police forces at its disposal, finds less than 12 percent of all the art that's stolen. And the items it looks for are mostly all perfectly identifiable. UNESCO's room for manoeuvre is small. We don't have any power to seize artefacts," says Prott. "For us, the important thing is to raise public awareness of the problem and change the attitude of museum officials, art dealers and collectors."

Sophie BOUKHARI



• **"ART AND CRIME"** was the theme of an international symposium recently organized at UNESCO by the International Federation of Senior Police Officials. Some 250 police officers, experts and museum directors discussed trafficking in stolen objects from former Soviet bloc countries. Security problems have been exacerbated by the breakdown of the previously strict border control systems. But Eastern European countries are not the only countries concerned. Germany, France, the Netherlands, Switzerland and the United Kingdom, all of which have prime art markets, have still not signed UNESCO's 1970 convention on trafficking of cultural property.

▼ Some one hundred actors, musicians, directors and jurists met at UNESCO, 30 to 31 March, to debate the living conditions of **"ARTISTS-PERFORMERS IN EUROPE"** faced with new communication technologies, which can transform their professions when used to simulate their performances. How can we protect the artists' work while encouraging them to use these new tools for creative ends? Only adequate legislation and cultural policies can permit artists to preserve their essential role in the creative process.

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LOOKING AHEAD

From 12 to 15 June in Seoul (Korea), about 70 representatives from inter and non-governmental organizations will meet to develop an international convention against **SEXUAL EXPLOITATION OF HUMAN BEINGS**. A debate and exhibition will be held at Headquarters from 15 to 17 June to mark **WORLD DAY TO COMBAT DESERTIFICATION AND DROUGHT** (17 June). UNESCO will partake in Paris' music festival with a concert in homage to **AMERICAN COMPOSER LEONARD BERNSTEIN** on 21 June. In Geneva (Switzerland), the Intergovernmental Committee of the International Convention for the **PROTECTION OF PERFORMERS, PRODUCERS OF PHONOGRAMS AND BROADCASTING ORGANIZATIONS** (Rome Convention) will meet, 3 to 5 July, to notably discuss changes brought on by new technologies. Also from 3 to 5 July, some 50 journalists and media experts will attend a round table at Headquarters on the **CULTURAL AND EDUCATIONAL FUNCTION OF PUBLIC SERVICE BROADCASTING** as part of the World Decade for Cultural Development. From 5 to 7 July, the Intergovernmental Council for the **MANAGEMENT OF SOCIAL TRANSFORMATIONS (MOST)** will meet at Headquarters. The jury for the 1995 **UNESCO PRIZE FOR PEACE EDUCATION** will meet at Headquarters, 4 to 6 July. Celebrating the 50th anniversary of the birth of **PONT PILATE**, a concert, round table and exhibition will be held at Headquarters from 7 to 21 July. **SUMMER SCHOOL ON SOLAR ELECTRICITY FOR RURAL AND REMOTE AREAS** takes place at Headquarters, 3 to 28 July, where about 30 participants mostly from Africa and Europe will learn about this technological revolution through presentations, exhibits and a visit to various solar installations in Spain. In Barcelona (Spain), the role of science education and culture will be discussed at the 5th annual session of the **INTERNATIONAL COMMISSION ON EDUCATION FOR THE 21st CENTURY**.

OUR NEXT ISSUE will travel along the "Roads" - the routes that have cut across civilizations for better or for worse: the Silk Roads, Slave Route, Iron Road, Road of Faith and Road of Al-Andalus.

UNESCO

SOURCES

N° 70 - JUNE 1995

EDUCATION FOR ALL: MAKING A MYTH

Alphonse Yarijah
Librarian
St. Petersburg (Russia)

✉✉✉ I found the articles in the issue "Education for All: Making it Work" (*Sources*, No. 66) totally pretentious. Developing countries are dog-tired of reading this high-sounding intellectual verbiage. If developed countries really want to help combat illiteracy, they must redefine their objectives.

"Education for All" will remain a myth for as long as war ravages the developing world. Let's go back to an agricultural project started in 1974 in Bunumbu, Sierra Leone, which was "hailed as a potential model for other countries" in the May issue of *Sources*, 1990 (No. 15). What has happened just two decades later? All of the good intentions, time, energy and cash invested by the project's founders have been swept away by war. A senseless war that is pushing the country into the stone age, forcing the denizens for whom the project was intended to abandon everything and run to safety in the city - Freetown.

The "Bunumbu experience" shows how shortsighted and wrong it is to try and implement services for only a cross-section of a society and hail it as a success. Before undertaking any educational "innovations", the developed world should first cleanse the society, which they are trying to assist, of the diseases preventing their aims from flowering into lasting achievements. Diseases stemming from arms sales, political corruption and financial fraud by governments. The list goes on and on.

By curing developing countries of such evils, the developed world can spare itself from the hassle of fighting the exodus of those searching for a better standard of living. For not even a simpleton would leave a good job in a peaceful environment for the unknown.

While others will argue that we are the ones hampering progress in the South, I believe that the coat of responsibility is hanging in the political wardrobes of the developed countries.

Just a mild warning in summing up. Before attempting to print any burning issues on the South, I hope that quite a number of different specialists with diverse

views from these countries will be asked to hold a symposium on the intended topic rather than leaving it in the hands of a faceless bureaucrat who will in the end only exercise his or her skill at the written language.



In our opinion, you have dissociated two questions which UNESCO's founders linked through a visionary sense of intuition: peace and development are interdependent. You suggest that there cannot be development without peace. But there also cannot be peace without development even if activities in this field aren't always crowned a success in terms of peace.

Concerning your conclusion, your recommended approach corresponds precisely to that taken by UNESCO in organizing "Audience Africa" last February (see the Sources dossier in No. 65, and the articles on pages 18-19 of No. 67).

THE MEANS TO MATCH THEIR IDEAS

I.F. Sathoud
Political scientist
Paris

✉✉✉ It is with great pleasure and interest that I read your issue on Audience Africa (*Sources*, No. 65).

Most importantly, I commend UNESCO for this initiative which, I hope, will have concrete results in the field. We have gotten bogged down in those eternal intellectual discourses, altogether lacking in practical applications, for too long.

In my opinion, all of the issues raised in the dossier are linked to the following question: Do Africans have the means to match their ideas and activities? Unfortunately, this question applies to all domains - from the political arena, to social issues and the economy. Insufficient means have left Africa dependent on Western countries and international organizations.

I particularly enjoyed the article on Sara Fesusu, the first black woman to direct the Biological Sciences Department at the University of Zimbabwe. This said, I might add that a photo of this woman would have livened up the article.

At the very least, we can say that, in addition to Africa's natural resources, the continent also has a wealth of men and women ready, willing and able to take their destinies in hand. Once again, all that's missing is the means.

KEEP IT GOING!

Barnard Kounakoff
Journalist
Marseille (France)

✉✉✉ I never miss a chance to read *Sources* and get to know UNESCO and its activities. I hope that the whole team will keep going with the excellent work which helps bring a cultural education to the far-flung corners of the world.

CHANGES NEEDED

J.E. Neiras Rivas
Professor
Université catholique de Valparaíso
Chili

✉✉✉ In my country, it is common knowledge that profound changes are needed in the education system - from primary school to university - if we are going to make progress in the 21st century. We feel that, when it comes to this area, no one is better informed than you are - whether it be through documentation, articles, experimental programmes or publications. This is why we are so grateful to receive the information provided.

A FRAGILE VICTORY

The means were modest: a six-page newspaper that appeared only once under the banner "May 3", and headlined "International Press Freedom Day" (created in 1993 on UNESCO's initiative), "Journalists day by day". The message, though, was a powerful one. With support from the non-governmental organization, Reporters sans Frontières and UNESCO, this simple newspaper was published in the powder-keg that has become Burundi. Its content - "the hopes and fears of journalists who resist, with conviction and courage" - provided yet more evidence that "telling the truth can still be a thankless task", as UNESCO's Director General, Federico Mayor stressed in a message to mark the occasion.

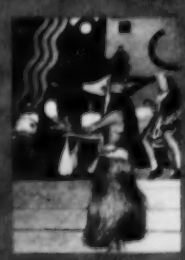
At least 130 journalists are being held in jails around the world at the moment. Last year, more than 100 were killed on the job - including one in Burundi and almost half of the rest in neighbouring Rwanda. Freedom of the press is indeed a fragile victory, and is always under threat. However, the Burundi journalists emphasise, liberty also has a flip side which cannot be ignored. "A press that hails ethnic fundamentalism is a press in the service of a dictatorship ... A press that preaches hatred kills more slowly and more surely than any other arm, because it starts by killing the spirit...It becomes the opium of an entire nation."

This is why Federico Mayor's message of May 3 linked press freedom with tolerance. Intolerance is the leading cause of attacks against press freedom. On the other hand, this freedom becomes tarnished when it serves to vent expressions of intolerance, and is inevitably suffocated by this intolerance when abused. But how blind are those who jump on the bandwagon of intolerance and hate? They cannot win. Inevitably they, in turn, will become victims of their own actions, reduced to silence by those who have become even more intolerant than themselves.

René LEFORT



Cultural encounters



Learning to live together



Sifting through the rubble

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LOOKING AHEAD

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BOOKS

NON-MILITARY ASPECTS OF INTERNATIONAL SECURITY

Nuclear proliferation and intra-state conflicts have transformed the notion of national security in the post-Cold War period to a polysemantic concept encompassing environmental, economic and social dimensions. Part of the series, "Peace and Conflict Issues", the book highlights the need for new international structures and tools in dealing with the non-military sources of conflict which threaten global security. The essays explore ways in which the changing political climate has both reinforced and undermined human rights conventions. By looking to Europe, we see the need for new coordinating mechanisms in dealing with inter and intra-state migration. With economic security increasingly threatened



by external events and challenges, state management approaches must be re-evaluated. We also see how global interdependence has transformed state sovereignty in assuring environmental and ecological security. Clear and concise, the essays provide the context and analysis needed not just by political scientists but any reader interested in international relations.

● *Non-Military Aspects of International Security*, UNESCO 1995, *Peace and Conflict Issues*, 258 pp., 100 FF.

ALPHA 94

Literacy and Cultural Development Strategies in Rural Areas Intended to jar your "complacent views" on literacy, the book's contributors have veered from the educational establishment in advocating community organizing as the most effective way of reaching rural communities. Instead of external interventions, rural communities are better served by tailor-made development projects improving people's standards of living while developing their basic education skills. Researchers and community organizers recount their experiences with projects in central and southern Europe, the United Kingdom, Canada, the United States and Chile.

● *Alpha 94 - Literacy and Cultural Development Strategies in Rural Areas*, Jean-Paul Hauteceur, ed., *Culture Concepts/UNESCO Institute for Education* 1994, 347 pp., 120 FF.

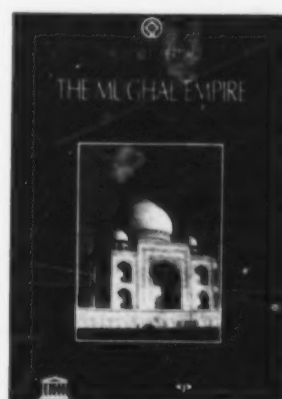
INNOVATIONS IN SCIENCE AND TECHNOLOGY EDUCATION

During a recession, education is often seen as a means to service the economy. But a technology education driven exclusively by economic imperatives might fail to address crucial value issues dealing with the control of technology and its use in relation to more global and environmental concerns. Volume 5 of this series provides a fascinating insight into a complex problem. It looks at the emergence of technology education as a type of curriculum drama with principal roles played by economic instrumentalists, technologists, sustainable developers, proponents of women's and girl's education, advocates of participatory democracy and liberal educators. Can a curriculum be developed to satisfy them all?

● *Innovations in science and technology education - Vol. 5*, David Layton ed., UNESCO 1994, 258 pp., 95 FF.

THE MUGHAL EMPIRE

Not for just any young reader between the ages of eight and 15, this book will appeal to those with a passion for history



and a refined taste for architectural design. Learn about the cultural and artistic influence of the Mughals, Muslim warriors from Central Asia, whose epic invasions dating back to the eighth century brought them to rule in India for more than three hundred years. Putting the period's conflicts aside, the book traces the architectural and aesthetic fusion of Muslim and Hindu influences by visiting the landmarks of Indo-Islamic design - the Shalimar Gardens, the Red Fort of Agra, the City of Victory and the Mansion of Happiness. The tour culminates with the Taj Mahal - that famous tomb built between 1631 and 1648 by 20,000 workers.

● *The Mughal Empire*, *The World Heritage series*, Childrens Press/UNESCO 1994, 34 pp., 72 FF.

PERIODICALS**THE UNESCO COURIER**

AIDS: A worldwide emergency The June issue examines the 20th century plague, AIDS. Specialists analyse the virus' "fool-proof" attack. After describing its spread among North African women and marginalised groups in Zimbabwe, the articles describe

strategies used in India and Europe to slow the disease down. Experts also explain the difficulties in developing a preventive vaccine and point out new therapeutic approaches to treating the disease. The issue opens with an interview with Romanian novelist Nicolae Breban.

MUSEUM INTERNATIONAL Egyptian Collections

Museums have played a fundamental role in bringing Egyptian antiquities to the general public. Some people go so far as to suggest that the science of Egyptology originated in museums through the wealth of artefacts amassed by private and public collectors. The main dossier of this issue (No. 186 2/95) takes a look at Egyptian collections around the world - from the new Nubia Museum at Aswan to exhibits in Russia, Ukraine, the Caucasus, the Baltics and Central Asia. Other articles focus on techniques and approaches aimed at breathing new life into these collections - from preserving mummies to computerizing artefacts at the Louvre - and point to the pitfalls in which a "serious" theme exhibit can turn out to be a "popular treasure show".



Publications and periodicals are on sale at the UNESCO Bookshop, or by order from UNESCO Publishing, 7 place de Fontenay, 75352 Paris 07 SP, and in Member States through national distributors. Catalogue available on request.

A TEENAGER DEALING WITH RACISM - PAST AND PRESENT

I'm sorry to say this - but people my age are sick of history telling them that they're guilty for the holocaust." The 17 year old Austrian student, Klaus Hyhold,



KLAUS HYHOLD
(Photo UNESCO/Inez Forbes)

wanted to speak his mind - not so much to the 24 other European students who, like himself, had won a writing contest on the theme, "Fifty Years After the Holocaust - Lessons for Europe". Rather, he was concerned with UNESCO's education experts and the representatives from the Simon Wiesenthal Centre. After all, these were the people who had organized the contest under the auspices of UNESCO and the European Parliament which would bring him to the Organization's headquarters on 17 May as well as to Brussels (Belgium), Strasbourg (France) and Israel as part of a cultural exchange programme.

"Racism is hidden in the way history is taught. In Austria, like all countries, students are taught their 'national' history," said Hyhold. "But we need to be more objective by going beyond national borders and broadening

our vision by learning through the eyes of others."

He pointed to Austria, where "every class" visits a concentration camp. "It has a real impact - we feel terrible and wish that it never happened. I still cannot understand how it happened. But each year, we're taught the same thing. And then you have politicians, newspapers and teachers all saying, 'look what your grandfathers did.' We're made to feel guilty in both a collective and individual sense."

Before long, Hyhold said, the lessons lose meaning. "You go, for example, to see 'Schindler's List' (a movie about the holocaust) and you feel that you have to be shocked - you don't think about it. You just show the 'appropriate' response. I know that all this sounds bad, but it's true."

Or you deliberately do the opposite. "The most provocative thing a young person can do is give the salute, 'Heil Hitler!'" said Hyhold, who feels that the rise in neo-Nazism in Austria is, in part, linked to the country's "strict laws" prohibiting extreme right movements. "These people like to do things that are illegal. You're not going to change their minds by just sending them to prison. They also need to learn through social activities," he said.

"It's very tense now in Vienna. I've been beaten up by both skinheads and foreigners. It sounds bad, but it's easy to be racist. I started feeling that way about foreigners but then a group of them came to our school to talk. This is the way we're going to learn the most - by getting to know each other."

Amy OTCHET

INDAI LOURDES SAJOR: WOMEN'S HUMAN RIGHTS

Indai Lourdes Sajor first encountered discrimination against women during a major flood in the Philippines in 1969. "I was helping to evacuate villagers stranded on the roofs of their homes. Several times I saw men trying to push their wives and children into the water to ensure a place for themselves in the rescue boats. It was an experience that I will never forget..."

Since then Sajor, aged 43 and a mother of four, has devoted herself to the struggle for the respect of human rights (which, under the Marcos regime landed her in jail



INDAI LOURDES SAJOR
(Photo UNESCO/Inez Forbes)

in 1974-75), and more specifically, the recognition of women's human rights. Over the past four years she has coordinated the activities of the Asian Women's Human Rights Council, which grabbed the headlines in 1993 when it filed a law suit against the Japanese Government on behalf of Filipino "comfort women" taken into "sexual slavery" during the Second World War.

"By focussing on women, we are also challenging the traditional vision of human rights, which mainly concerns civil or

political rights. Abuses of these rights have generally been defined as state inflicted violations. Women's human rights, on the other hand, are broader, and take into account the family, the community and the rights of women in wars. We argue, for example, that wife battering is an abuse of a woman's human rights, and that rape in armed conflict situations should be considered a war crime. We defend the idea that maternity be a question of free choice, dictated neither by a husband nor the state."

The issue is starting to gain momentum. To push it onto the international agenda, non governmental human rights and women's organizations from all over the world met under the umbrella of the International Federation of Human Rights Leagues (FIDH) and UNESCO at the Organization's headquarters over May 30-31 to draw up a "lobbying tool" dubbed "Platform Plus", which will be presented at the Fourth UN Conference on Women in Beijing (China) in September.

"Platform Plus," Sajor explains, "fills what we consider to be gaping holes in the Platform for Action that has been prepared for the Beijing Conference. It is also an answer to certain conservative elements that would keep women in a disadvantaged and even oppressed condition. It puts things into the perspective of women's human rights. And it will only be through the recognition of these rights that we can hope to make the social, economic and attitudinal changes necessary to ensure the effective participation of women in all levels of society."

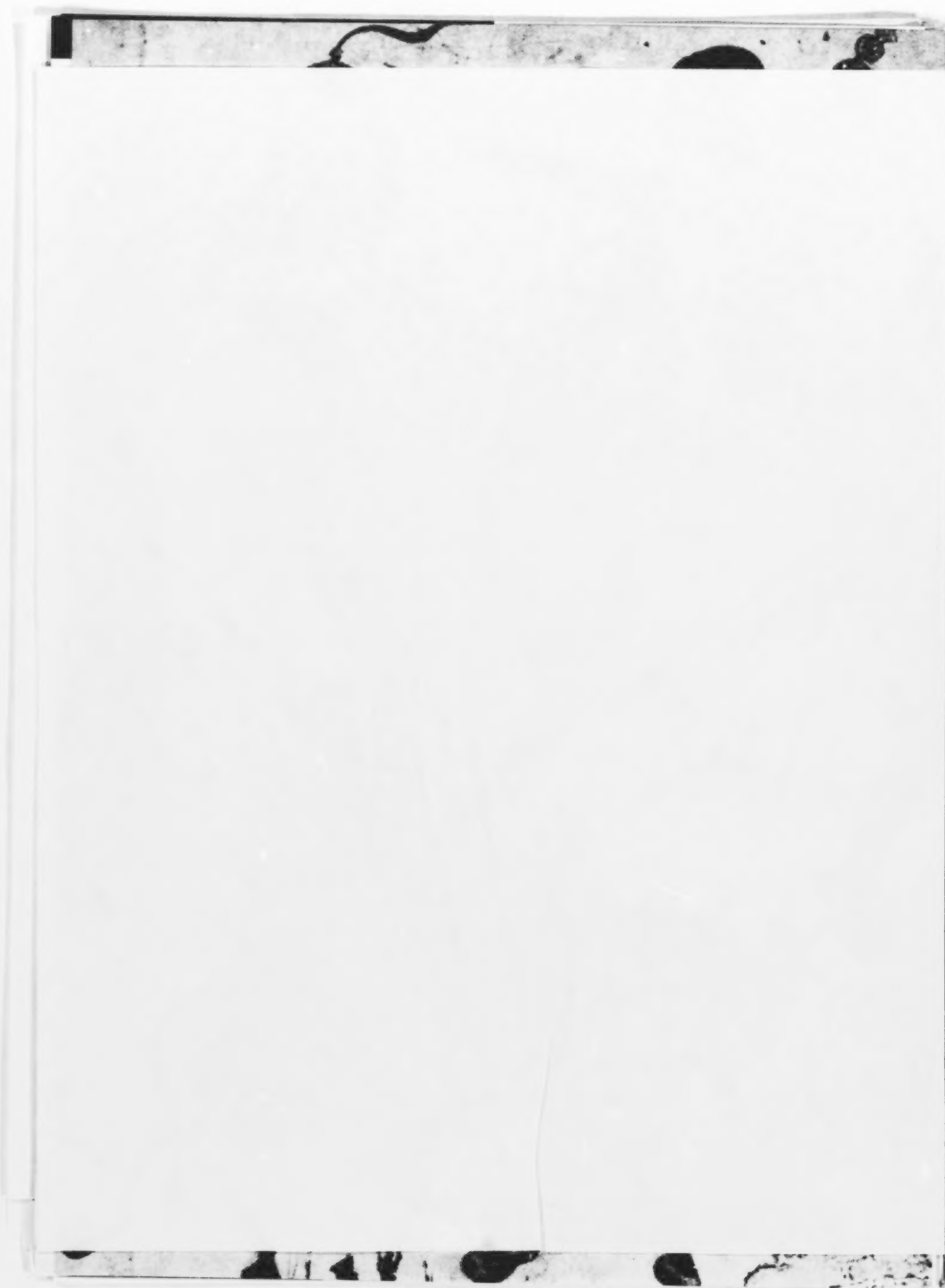
Sue WILLIAMS

● **WORDS OF WISDOM** for budding scientists from 1973 Nobel Prize winning physicist, Dr Leo Esaki, who was invited to address the 146th session of UNESCO's Executive Board in May: "Don't allow yourself to be

trapped by the constraints of your past; don't allow yourself to become overly attached to any authority in your field; don't hold on to what you don't need; don't avoid confrontation; and don't forget your spirit of

childhood curiosity." Dr. Esaki, a specialist in semiconductor physics, and inventor of the tunnel diode that bears his name, believes that innovation is the way to the future.

This requires not only a radical break with the past but a strong dose of intellectual creativity, which he lamented, was not necessarily promoted by standard academic education systems.



WHEN EAST MEETS WEST AND NORTH MEETS SOUTH

At a time when cultural identities are being fiercely defended in many parts of the world - for better or for worse - it is perhaps relevant and wise to consider how we came to be who we are. A look into the past, that of the individual or an entire civilization, will inevitably show that at some point there was influence from elsewhere, encounters with others, movement from one land or region to another (see below). To better understand how these movements have influenced our world, UNESCO has launched, or is preparing, a series of projects studying the routes that have connected the world's peoples from time immemorial: the Silk Road between East and West (pp.8-9); the Slave Route that so altered the history of Africa and the Americas (pp.10-11); the Iron Road in Africa that has helped to shape all of the continent's cultures (pp.12-13-14); the Routes of Al-Andalus between Europe, the Arab world and Black Africa (p.15) and the Roads of Faith that have led three of the world's major religions to Jerusalem (p.16).

In 1988 UNESCO launched its Integral Study of the Silk Roads: Roads of Dialogue. It was a daring, and extremely ambitious idea that set out to reopen doors to the past thus shedding new light on the present.

Through a vast programme of research that has mobilised scientists, academics and the media worldwide, and that has included four major expeditions, the Silk Roads Study has challenged concepts and visions that today stand as obstacles to the harmonious coexistence between peoples. Concepts such as identity, undoubtedly a vital force, but also a cause of oppression and domination, a means of both self-affirmation and denial of the other.

The numerous studies carried out under the Silk Roads banner show that identity, seen with the perspective of history, cannot be viewed as a ghetto or an enclosure. Rather, it must be achieved and recognized as a process, a synthesis and an encounter, a product of that mysterious alchemy through which a people absorbs, transforms and assimilates influences from elsewhere.

The Silk Roads have highlighted this giving and receiving and, even more importantly, the central role played by the movement of people, ideas and values in the growth of cultures and even

civilizations, whether it be through the spread of Buddhism, Islam or Christianity between east and west, the use of Chinese glazes by ancient Arab potters, enchanted by the fine blue and white porcelain that arrived by sea from the East, the admiration and emulation throughout the Orient of Roman glassmaking techniques or the adoption of Indian medical knowledge and surgical techniques by the Greeks and even the Chinese.

NEW CIVILIZATIONS

The route that has wound its way between East and West across the centuries is but one of many that have linked peoples and cultures around the world and given direction to the course of human history. Others include: the Slave Route, which, barbaric as it was, came strangely to be instrumental in laying the foundations of a new civilization in the Americas, the Caribbean and the West Indies; the Iron Road in Africa, which served as a link between the different cultures of Africa, almost all of which were profoundly marked by the advent of iron-making, from their religions to their political and social structures; the Roads of Faith which, for at least three of the world's major religions, representing half of the world population, lead to Jerusalem; and the routes of Al-Andalus, the meeting point

between Europe and the countries of the Maghreb and Black Africa, still evident today in the art, customs, gastronomy and craftsmanship of Andalusia.

All of these "roads" stress the slow process of the underlying forces of movement, encounter and interaction, that ironically, given the global village in which we live today, have been somewhat forgotten. Instead we are witnessing the rise of tendencies towards confinement, enclosure and rejection - none of which have ever contributed to our development or growth.

It is with the direct aim of countering these tendencies that UNESCO has undertaken to "re-open" these roads. Using the experience gained from the Silk Roads Study, serious academic research programmes have or are being developed with the active cooperation of scholars and artists from all corners of the globe. The participation of the world's media at all stages will allow the fruit of these programmes to be shared as widely as possible, in the hope of creating fertile ground for the genuine meeting of peoples so urgently needed to change the spirit of the times.

Doudou DIENE,
Director,
Division for Intercultural Projects

UNRAVELLING THE SILKEN THREAD

"A scholar's dream come true", the Silk Roads project treks through history, at the same time generating a range of publications, films and an international network of research centres.

When Liu Yingsheng first began lecturing on Sino-foreign cultural exchanges, he was nervous about the lack of supporting facts that he took with him into the classroom.

visualise evidence that I had only previously been able to read about, and discuss it with other scholars has greatly helped my research on Chinese nationality and border issues," he says. "More broadly

Chinese culture and history but had few clues as to how they were perceived in less industrialised countries. He was surprised, for example, by the suggestion of a Sri Lankan scholar that Zheng He's famed trading expeditions across the Indian Ocean were really just a show of arms in South and South-East Asia, as evidenced by his capture of a Sri Lankan king. For Liu, Zheng's voyages have always been considered as the period's most important navigational feat and a symbol of the shared cultural heritage between Asians and Africans before the advent of Westerners.

Liu is but one of some 205 scholars from 45 countries to take part in the four Silk Roads expeditions made since 1990. And this doesn't include the numerous local scholars involved in the 24 international symposiums and the 241 debates and lectures held along the way.



Today, his main concern is to make room for all the students wanting to attend his lectures. For Prof. Liu, an historian specialising in ancient Chinese civilization, has now walked in the footsteps of that ancient Chinese mariner and adventurer of the Ming Dynasty (1368-1644), Zheng He. He has visited the birthplace of the eminent Tang Dynasty (618-907) poet Li Bai in today's Kirgiz Republic, and has been dazzled by the reach of ancient Chinese civilization to such faraway places as Egypt - home to a collection of the oldest found Chinese pottery. He has exchanged knowledge and debated points of Chinese history with scholars from a range of disciplines and nations. In short, he has been deeply involved in UNESCO's Integral Study of the Silk Roads: Roads of Dialogue.

Professor Liu, Director of the Institute of Asian Studies in China's elite Nanjing University, is one of a handful of Chinese who speaks English, German, Persian and the Turkish. His research is focussed on ethnic minorities in China's politically turbulent northwest and Sino-foreign cultural exchanges. He has participated in three of the Silk Road expeditions - along the Maritime Route, the Altai/Nomadic Route in Mongolia and the voyage across the Steppes of Central Asia. "Being able to

speaking, the expeditions have made an enormous contribution to the understanding of Chinese culture."

One question that had always puzzled Liu, for example, was the voyage of Zhang Qian, dubbed the "Father of the Silk Roads", who went on a secret mission to the West for Emperor Wu Di (140 B.C - 87 B.C): why undertake what at the time must surely have been a perilous voyage? "The expedition reminded us that China was not the only country which has a 5,000 year history of civilization," says Liu. "Ancient Egypt built the pyramids some 5,000 years ago and India, at the same time, built its cities with materials similar to today's bricks and tiles. Our adventurer simply set out to find out what he could about these other great civilizations to the West."

Another important discovery for the professor was the extent to which China influenced regions criss-crossed by the silk roads. In all 16 seminars held during the Maritime Route expedition, foreign scholars made reference to China. Chinese relics, including coins, are found in all of the countries east of Egypt: while Egypt has the oldest Chinese pottery, for example, Turkey has the greatest stock of porcelain.

Before the expeditions, Liu was familiar with the views of Western scholars on

A NEW LEASE ON LIFE

The Silk Roads have been featured in hundreds of articles geared for both the specialists and the non-initiated. With 36 national documentaries focussing on various historical aspects, a special Image Bank has been set up with about 400 hours of video and film footage. The Roads have generated some 40 publications, six of which are published by UNESCO, including the popular Childrens' Series. The project has also given rise to the Hirayama scholarship programme which enables 10 young researchers, particularly from developing countries, to make the treks.

An international network of research centres is also being stitched together with five centres, two each in China and Japan with another in Sri Lanka, running studies, newsletters and exchange programmes and another planned in Mongolia. The International Institute for Central Asian Studies is being set up in Samarkand, Uzbekistan, which already has proposals for joint projects with the Indira Gandhi Arts Centre in India and a future research institute in Taxila, Pakistan. All of which might offer a "new lease on life" to the ancient Silk Roads.

Yan WENBIN and Yang FUTIAN
Beijing

THE BUDDHIST ROUTE

The fifth expedition to be carried out under the Silk Roads banner will retrace the spread of Buddhism from its origins in Nepal overland to China.

The prince who became known as the Buddha was born 6th century B.C. near Lumbini in today's Nepal.

Siddhartha Gautama, the son of a local potentate, was gifted with unusual wisdom and gentleness, which an astrologist predicted, would prove to be the pillar of his extraordinary reign. The prince's father, thinking he was dealing with a future saint, kept him closely protected, shielding him from the outside world, providing him with all he needed for an easy life. But the prince nonetheless encountered the poor, the sick and the those living in abject misery.

His curiosity to find out more about the outside world and its inhabitants took him out of his cocooned world and onto the path of discovery. He became an ascetic, detached from material life. Disciples gathered around him and it was they, who, after his death in 483 BC, carried his teachings southwards and eastwards throughout India and beyond to Sri Lanka and Indonesia, northwest through Pakistan, Afghanistan and Central Asia (today's Uzbekistan and Tajikistan for example) and from there, further east to China, thus creating a vast current of humanistic thought.

REMARKABLE DIVERSITY

The first "biography" of the Buddha dates from the first century B.C. and recounts his (essentially legendary) youth, his adult life and the "enlightenment" and his last voyage and death - or "parinirvana". But the literary and artistic production that accompanied the spread of Buddhism were nothing short of prodigious - far more has been written about Buddha's teachings than the Bible's, for example. Their diversity is just as remarkable as their quantity. Local legends were adapted and incorporated into the story of the Buddha's life, and in them, he often appeared in animal form. Buddhism was thus supple enough to be adapted to the beliefs, sentiments and customs of the peoples it addressed, providing of course that they weren't incompatible with the its principles. According to French researcher André Bareau this suppleness was made possible by the lack of any superior authority, such as Christianity's papacy, defining and imposing an orthodox system of belief and practice.

Despite the differences though, Buddhism has remained a philosophy (more than a religion) of tolerance, gentleness, respect and with a vision of the future that attempts to transcend the present, which sets it completely apart from Western thought.

We don't really know why the peoples of Asia adopted Buddhism instead of Christianity, which was travelling the Silk Roads at about the same

Rome. West of Persia, Christianity rapidly took hold and advanced into Asia Minor, with sub-sects such as the Nestorians springing up. But their attempts to go further East failed. Likewise, Buddhism, despite its success in Asia, did not make it in the West.

The seventh century also heralded the arrival in force of Islam which eliminated a certain number of sects that perhaps could have gone one way or the other. But Buddhism was by that time well rooted right throughout Asia, and proved more resistant.

Buddhism is still flourishing today in Japan, South Korea, Sri Lanka, Thailand and Myanmar, but there is no doubt that it has profoundly influenced all of the peoples and civilizations of Asia, contributing enormously to the construction of their cultural identity.

THE EXPEDITION

UNESCO's Buddhist route expedition will retrace the spread of Buddhism by land, studying the relations between it and other religions and cultures in regions that are very different from one another such as India, Pakistan and China.

The expedition will be carried out in several phases, starting in September this year at Lumbini. The following stages are planned for 1996 and will follow the tracks of the Buddha in India, visiting those sites that witnessed the events of Buddha's religious life - from the experience of his "enlightenment" at Bodhgaya to his entering "Parinirvana" on death. Later in the year the expedition plans to travel from Taxila in Pakistan to western China, travelling around the southern rim of the Taklamakan Desert, visiting Dunhuang, Lanzhou and Xian to its final destination in Luoyang.

The expedition will also examine the state of sites inscribed on the World Heritage List, prepare an inventory of the main museums containing Buddhist art collections, along with institutions and research centres that could be incorporated into the UNESCO Silk Roads Network (see p.8).

Sue WILLIAMS with Cornelle JEST,
Anthropologist, Paris

time. Perhaps it can be put down to the existence of a sort of psychological barrier whose borders could be drawn through Persia, which was also the geographical barrier between India, Central Asia and

OF HUMAN BONDAGE

Shedding light on the slave trade - an act of barbarism, foundation of new civilizations, and still today, an open wound.

A commonly held opinion today is that Africa's ideology is based on slavery", contends Catalan writer and philosopher, Lluís Sala-Molins, who pleads for an "entirely new analysis - sincere and profound" of the roots of slavery. For Sala-Molins, it is time to get rid of still widespread but false ideas about the triangular slave trade which, from the 16th to the 19th centuries, prospered thanks to the deportation of millions of Africans to the Americas.

You still hear people say that "the only thing imposed on Blacks, was a change in masters," he storms. In other words, according to (the noted 17th century French Bishop) Bossuet, Europeans simply took advantage of the African slave tradition.

In fact, the practice plunges its roots into our distant past. As Guadeloupian historian Oruno D. Lara explains, forced labour existed in all the civilizations of antiquity, but it was the Greek city states which were the first to elevate slavery to the rank of an institution and reduce the slave to the status of merchandise, "a sort of animated property".

"Europe discovered slavery well before the Americas did," insists Sala-Molins. But up until the 16th century, the regular traffic it carried on, drawing most of its "raw matter" from the white ("slavic") populations living on the fringes of Christianity, was small scale compared to the veritable industry for which Africa later paid such a high toll.

ETHICAL HEALTH

From the 16th century on, the Portuguese began to bring Europe black slaves who had fallen victim to Moorish traders passing by way of Egypt and Morocco, or followed the salt routes across the Sahara. Development of the "American Indies" was soon to bring about an explosion of the trade which culminated during the 18th century - the Enlightenment and the Declaration of the Rights of Man and of the Citizen.

A new analysis of the roots of slavery is, therefore, in the opinion of Sala-Molins, a question of ethical health. This is not the only question at issue. The rough knowledge we have of slavery in fact, enables the most debatable theses to flourish. For example: did the Africans willingly

collaborate with the slave traders? If some Europeans continue to support this thesis, it is, on the contrary, politically correct on the African continent to deny such a possibility.

"For the historian, the situation is however, not so simple," says Elikia M'Bokolo of Zaïre. Of course, he adds, "slavery was a situation of inequality, founded and maintained by the constant threat of arms by the Europeans." But "the social history of precolonial Africa reveals that slavery was an institution common within States where it existed already, in certain cases, as internal trade carried out with military and economic ends in view."

He points out, moreover, that "we cannot analyse the role of Africans with regard to slavery without mentioning the part they played in its abolition", an aspect he considers to have so far been totally neglected. Worse, Africans are even presented as the principal adversaries of the abolition of the triangular commerce, whereas the victims of the trade strongly, even violently, resisted, through escape and armed

in September 1994, UNESCO launched the "Slave Route" project in Ouidah (Benin, one of the ancient centres of the trade on the Gulf of Guinea). The objective of the project: to coordinate and support research already being undertaken on the Atlantic trade, to retrace its evolution and seek a better understanding of why this fundamental chapter of history, yet studied so little in our schools, could be neglected for so long. Beyond this, the project proposes to analyse and reveal consequences of the slave trade in the African continent and in the countries to which the slaves were deported.

"It is essential to examine a phenomenal paradox," said Doudou Diene, Director of UNESCO's Division for Inter-Cultural Projects. "From the initial act, the most barbarous of all, the black slave traffic went on to transform itself by laying the foundations for a new civilization." It is in America, the Caribbean and the Antilles where they merged with other peoples, that the cultural effects of slavery are the most tangible. "Whether in music, poetry or

insurrection, as in Santo Domingo in 1791. According to Elikia M'Bokolo, "those who succeeded in escaping took a very active, often little known, part in the abolitionist campaign," notably through publications denouncing slavery at the end of the 18th century.

As long as the phenomenon of slavery, its causes and development are not elucidated, preconceived ideas will continue to prevail. This, among other reasons, is why

other domains, these encounters resulted in an extraordinary blend which no one could have foreseen." Certain products like jazz, reggae or rap returned to Europe, the continent which was at the origin of the triangular trade. "We have matter here for a rich dialectic which continues today and reaches towards the future."

Sophie BOUKHARI
and Yves-Claude LLORCA

AFRICAN TRACES

"Every Mexican has an Indian, Spanish and a Black heritage"... The same is certainly true for many of Latin America's peoples.

Stripped of their clothes, their weapons confiscated along with their tools and musical instruments, the black slaves came with the images of their gods, memories and stories of their ancestors, the rhythms of their songs, their poetry and their moral, social and technological wisdom," recounts Colombian anthropologist Nina Friedmann.

For a long time, these elements of African heritage on the cultural development of the Americas were absent from social science research. But today, history does not just settle for the dry evidence of dates and figures, and over the past 30 years, Africanists or Afro-American researchers have intensified their studies to better understand these "African traces".

This heritage varies with the different peoples of the region: whereas in some black communities of the Caribbean, "Africanisms" are still clearly identifiable in religious beliefs and practices - such as voodoo - or within family structures, the African roots of other populations, three centuries later, can only be traced through communities of a mixed Indian-black-white background.

BURIAL RITES AND EXTENDED FAMILIES

Friedmann, who is also editor-in-chief of the journal *Black America*, points to the African origins of a burial rite observed in Colombia called "lumbalu" - an African word of Bantu origin with the prefix "lu" meaning "a gathering" and "mbalu" meaning "funeral singing". She adds that "the dead and the living are part of a universe full of spirits inhabiting the sacred and profane spaces of daily life." She explains how, at Palenque de San Basilio (Colombia), this cultural baggage has been transformed throughout the centuries. "Tradition has it that relatives and friends of the deceased share a cow or a pig on each day of mourning in the same way that meat and drinks are prepared during mourning rituals in African societies."

The "palenques" were the places where rebel slaves lived in ostracism, forming self-sufficient communities, that, apart from the fact of their isolation, allowed the descendants to invent, assimilate, or modify their culture without feeling the

weight of the cultural systems imposed by colonial society. Palenque, for instance, has provided researchers with a prime example of the extended family system, considered by some specialists as the most important legacy of the African diaspora. Fleeing slaves, forced to organize themselves to survive, thus "adopted and recreated community life styles, kinship structures and norms of behaviour" says Friedman. "We may also speak of memories, feelings, smells, aesthetics, textures,

were assimilated into the Indian and Hispanic cultures," explains Luz Maria Martinez Montiel, anthropologist and Director of Mexico-based regional programme known as "Afroamerica: The Third Root" which is also supported by the Slave Route project. "Finding and understanding the African heritage in Mexico means looking for the presence of blacks in popular culture: through religion and magic, popular speech, traditional medicine, eating habits, music and dance."

"CHOTELO DANCES"

In Campeche, on the south-eastern Mexican coast, for example, slaves were able to watch their masters dance in the European fashion, which they then imitated and interpreted giving rise to what's known "choteo dances". Another example are the songs of African origin known as "zarabandas" that are sung at the end of year harvest celebrations.

This is but a sample of the vast African contribution to music in the Americas, and the obvious presence of racial mixing in popular culture. As Martinez puts it: every Mexican has an Indian, Spanish and a Black heritage... The same is certainly true for many of Latin America's peoples, and, says Martinez, they should understand this.

The Third Root project takes a three-pronged approach through historical, cultural and sociological research; provision of information for the general public through a 25-volume publication on the repercussions of African slavery in Latin America, an Annual Afroamerican Arts festival to be held year about in the Americas and Africa and an itinerant exposition to which all countries of the region will contribute entitled Afroamerica 2000; and the production of educational audiovisual material and the development of tertiary level courses on Afroamerican topics.

But knowledge and recognition of the African influence on the peoples of America is not only essential to understand the region's historical identity, argues the Mexican researcher. "It will also provide the basis on which Afroamerican peoples can unite to build their common future."

Liliana SAMPEDRO

colours, harmonies and other symbolic elements that have provided the raw material for the birth of new Afroamerican cultural systems."

Taking this into account the Slave Route programme has emphasised projects that study the resistance put up by the slaves. One such project, for example, will see the compilation of the oral traditions of the "cimarron" settlements (made up of escaped slaves), including those in the palenques of Colombia.

In other countries, such as Mexico, the African identity is less obvious. "Blacks

"JUST LIKE ANY OTHER MAN"

Part of the lowly "caste" of the blacksmith, Mbaye Thiam is still considered in his neighborhood as a "distinguished" person for his dependability and honesty.



Mbaye Thiam, a blacksmith by his birth in 1924, has earned a reputation for rigour and honesty in his craft. Despite his modest social standing and lowly caste, he is admired by all and "considered to be a distinguished" person.



The forge is just a few cable lengths from the local mosque in the M'Babara quarter of Thies, one of Senegal's biggest cities.

Raw materials are bought from scrap metal vendors who recycle junked cars and covert trucks for their thick metal pieces. But, says, Master Mbaye Thiam, "when we were young, we could get lots of iron from all the factories which used to be scattered throughout the city. But our trade has really changed - we're no longer needed, making our future more and more uncertain."

The day begins at seven o'clock in the morning, "before tongues start wagging", and ends late at night, "when the loose tongues have stopped chattering".

"On a good business day, earnings can go as high as 50 FF (about \$10). But during a slump, they drop as low as just 15 FF (around \$3)."



Talla, the former master

The smithy makes everything. The shopkeepers also make big hoes, machetes and other things. But we also make stoves, co



PHOTO ESSAY



The old Mbaye pays no attention to the lowly reputation of the blacksmith. He knows that he is "just like any other man, a good Muslim and an honest worker - the rest is up to God... Before going to the workshop, I recite some verses from the Koran, I sprinkle water over my place and where the apprentices work to ward off bad luck. I also ask my apprentices to do the same before they touch anything."

who Mbaye Thiam still consults.

order. "The farmers are our best customers. But the
dys for stuff like hilaires (a tool used for weeding).
g All of the tools are then resold in the countryside.
g pots, ladles..."



Mbaye Thiam's faith is kept up by his son Amadou, who will succeed his father and is content to take sales, share the jobs and coordinate work between the group. "Beside Amadou, three of his younger brothers are with me. They give a hand after school." In fact, it is hard to have other apprentices who are not part of the blacksmith caste. As Mbaye Thiam insists, "the forge is reserved for the initiated".



Texts by Cheikh El Hadj Amadou,
photos by Ibrahima Mbodj.

FIRE UP THE FORGE

"The Iron Roads in Africa" uncovers the origins of iron-working on the continent as well as a few dying embers which if properly stoked might rekindle the African forge.

The discovery and use of metal, especially iron, is one of humanity's greatest victories, after the domestication of plants and animals. Iron tools have enabled great expanses of the earth to be conquered and developed. They have also revolutionised warfare and brought about profound socio-economic upheavals.

It was once thought working in iron was introduced into Africa - through North Africa or the Nile Valley - from Asia Minor, where the Hittites supposedly invented it. But this theory, dating from the 1950s, has been totally discredited by archaeologists. Digs in Niger show iron was smelted there as long ago as 2000 and maybe 3000 BC. So it seems working in iron was invented independently in Africa, before Asia Minor.

STRONG STATES

The advent of iron deeply affected African societies and led to the creation of strong states. Takrur, a Senegal River valley state from the third to the eighth centuries, was founded by a dynasty of blacksmiths, the Jaa-Ogo, who introduced river-bed cultivation and whose power was built on their control of iron. There were also the Sosso, whose most famous blacksmith-king, Soumaouro Kanté, dominated Mandé (Mali) in the 13th century before being defeated by Soundiata.

Iron use did not spread throughout Africa in straight lines, from one fixed point to another. It spread more by osmosis, as iron-working was taken up by various peoples, indelibly changing their history. This is why African societies have accorded respect and privilege to the "iron men" who are key figures in traditional religions and in social and economic life. They have different social ranks, depending on the society. In the Islamic societies of the Sudan-Sahel region, they are considered a separate group within the society. However, modern sociologists have wrongly seen them as a distinct caste. In forest areas, they are sometimes considered superior beings keeping an economic, political and moral eye on society.

Iron-working played a big role in the emergence of some African states, but it has also been an agent of stagnation, even

decline, in the continent. This is explained by technical factors. In the beginning, ore was directly smelted, thus producing usable iron in a single operation. Craftsmen built small furnaces which they alternatively fed with charcoal and ore. At about 1,200°C, the iron ran free of the ore's impurities, or dross, which still contained some iron which was thus lost. The metal produced was then further refined by hammering while it's hot and transforming it into objects.

THE CHINESE CONNECTION

The other method, known as indirect smelting, was invented by the Chinese around the fourth century AD. The iron was extracted in two stages. Cast iron was produced after total liquification of the ore in large furnaces at 1,535°C. With its excess carbon removed, it was then made into steel. This more efficient method arrived in Europe in the 14th century and later served as one of the pillars of the Industrial Revolution.

But Africa used simple smelting right up to this century, making it a non-starter in world markets. Also, because it required huge quantities of charcoal, this method was a serious threat to the forests and the ecological balance. Iron bars produced in Europe were snapped up in Africa as soon as the two continents made contact. This put an end to Africa's technological

independence in iron production and destroyed the status of the blacksmiths, who were then largely confined to making metal objects.

So the contact with Europe hurt the iron trading routes, which were to be violently superseded by the slave routes. Iron quickly became a fairly ordinary currency and the slave traders imported it from Europe on a huge scale, steadily killing off many production centres. This decline, combined with the loss of technological initiative in metal extraction and the collapse of the iron routes explains, to a large extent, why Africa started to lag behind Europe in the 15th century.

But the big hope for the future is the adaptation of Africa's metalworkers to the new situation. From working with iron bars to recycling, the continent's blacksmiths have always met the public's needs, especially in the countryside, where the local forge still plays an important economic role by making and repairing basic farm equipment.

This function, long obscured by a heavy industry geared to development, is again in vogue, making the African forge an increasingly viable alternative to more costly transfers of technology.

Hamady BOCUUM
Archaeologist,
Dakar

Approved by UNESCO's General Conference in 1991, "The Iron Roads in Africa" aims to promote multi-disciplinary research in exploring the impact of iron-working on the evolution of African societies and highlighting iron as an object of intercultural exchange, and a means of reinforcing the links between the continent's different peoples.

By taking stock of existing knowledge on the subject, the project points to new research directions, notably, those concerning mineral resources and iron craftwork in Africa today. Teaching materials and more general publications are also in the works to foster awareness of these research findings and promote this technological innovation.

At least 16 countries and the Organization of African Unity (OAU) have supported the project, which is being coordinated by Mozambique. A scientific committee has been established to guide research, and is presided over by Frank Aig Imoukhuede from Nigeria.

THE LEGACY OF AL-ANDALUS

Unveiling the forgotten past of Moorish Spain, where one thousand years ago a peaceful and prosperous society managed to "synthesize" cultural and religious differences.

A thousand years ago, in the 10th century, Andalusia became a striking example of how Muslims and Christians, living side by side, could create a remarkable common culture free of daily religious conflict.

Back in 711, the Moorish army of Arabs, Berbers and Persians had crossed the Straits of Gibraltar. They quickly routed the Spanish Visigoth monarchy's troops and occupied most of the country as far north as the Douro and the Ebro rivers.

The fertile valley of Guadalquivir had come into production in the ninth century thanks to serious agricultural research and the introduction of species from the Orient like citrus fruits, peaches, sugar-cane and date palms. But the political situation was not settled until 929, with the establishment of the Cordova caliphate.

From then on, Spain became a major diplomatic centre and the leading power in Western Europe. Cultural integration picked up speed. The caliphate wanted to seem as Arab as possible, introducing Arab ways and fashions in every possible sphere - dress, gastronomy, behaviour, education, etc. But, at the same time, the court under the caliphate remained very Westernised. Local ties were maintained, used and expanded and influences from the north and the south were absorbed.

THE DEATH KNELL

This effort to build a cosmopolitan, almost universal civilisation lasted more than a century. In 1031, the caliphate split under pressure from the north. In just 30 years, the balance of power had swung back. The Moors now paid for their earlier conquest. In 1075, Toledo fell to the Christians and the death knell sounded for the cultural experiment. Religious intolerance on both sides killed it off, despite some high spots still to come in the 12th century and flashes of a revival as late as the 15th.

When Granada fell, the Catholic kings began the systematic persecution, the "ethnic cleansing", of all Muslims. The two sides were completely shut off from each

other for 500 years. The separation is still rooted in the minds of the two peoples, even among some scientists.

This is the origin of UNESCO's project to encourage research into the Andalusian inter-cultural experiment. Today, little is known of this heritage despite the great efforts made mainly by Spanish intellectuals over the past 25 years. The project breaks down into five areas of study - Moorish Spain, northern Spain and its Western background, the Arab Orient, Westernised North Africa and the Sudan-Sahel region. Easy assump-

most oriental plant species to the West. Then there is the science of perfumes, of which the Arabs have long been the best and biggest producers. In the writings of the time, they accused Westerners of smelling terribly!

But the main thing to look at is the cultural synthesis. In Andalusia, three cultures with three religions (Christianity, Islam and Judaism) tried to reach an understanding and succeeded for a very long time. So far, this has only been studied in historical sequences. What should

be examined now are the contexts which enabled the movements, the transfers, the synthesis itself.

Spain's Jews played a very important role in promoting this tolerance. But there were others, such as Al-Bakri, a Cordovan who wrote from his tavern in the 11th century, quoting Seneca, Christian theologians and ancient authors of the Iberian Peninsula and elsewhere. He embraced them all instead of rejecting them in the name of Islam on the grounds that they came from a pagan culture.

All this has been hidden. For centuries, it has been as if Moorish Spain never existed. That heritage must now be brought to light. For such cultural synthesis is probably our best hope of

getting the keys to an understanding between the Atlantic edge of the Islamic world and the West.

Jean DEVISSE
Historian, Paris

With 12 itineraries, 14 exhibitions and a series of scientific and informative publications, the project "The Legacy of Al-Andalus" evokes the culture developed by Muslims in Spain between the eighth and 15th centuries. It was launched early this year by the Spanish institution Sierra Nevada 95 with UNESCO's cooperation to promote cultural tourism in Andalusia.



A 12th-century illustration of a Muslim and a Christian in a room with a tiled floor. The Muslim is on the left, wearing a turban and a long robe, holding a book. The Christian is on the right, wearing a crown and a long robe, also holding a book. They appear to be in a discussion or a teaching session. The background shows a tiled floor and a wall with a grid pattern.

tions must be dismissed and the complete mingling of ideas and goods must be kept in mind. The best-known fields were mathematics, astronomy and architecture.

But some major ones are still to be explored. Astrology, for example. Whole treatises were translated from Arabic to Latin in the 12th and 13th centuries and got as far as England. There is also the para-science of semi-precious stones, which played a big role in the history of the Mediterranean and the southern Sahara by generating an invisible trade between the two regions. Health sciences too, from botany to medicine: Moorish Andalusia was responsible for introducing

ALL ROADS LEAD TO JERUSALEM ...

... at least for the world's Muslims, Christians and Jews, who make up half of the planet's population.

As a young lieutenant on National Service, John Bowker was sent to Northern Nigeria in the last days of the British Empire. One afternoon his unit was ordered to stop a riot between Muslims and Animists in the local marketplace. An inter-religious dispute had been triggered by a quarrel over a donkey. *"Their anger was so great that the two sides literally tore the donkey apart ligament by ligament. It was terrifying. I looked into the eyes of the two sides and saw a deep hatred,"* says Bowker.

At that point he says, he knew what his lifework would be. *"I wanted to find why religion could stir such deep hatred in people."* Forty years later John Bowker is Gresham Professor of Religions at Gresham College, London and author of many books on the subject. He says that his work has given him a deep understanding of the nature of religion and *"the resources in religion that can be mobilised for peace and reconciliation."*

This has made him an ideal person to draft the "Roads of Faith" Project for UNESCO. The project was first proposed by Morocco in an effort to better understand the forces that bind three of the world's major religions to the holy city of Jerusalem.

To the Jews, David's capture of Jerusalem from the Jebusites was instrumental in bringing together the tribes of Israel. The Ark of the Covenant was brought to the Temple built by Solomon. The Temple was on Mount Zion, the centre of the world for Jews. Since the destruction of the Temple

by the Romans, Jerusalem has become a metaphor for the Jews covenant with God.

To the Christians, Jerusalem is the place where Jesus conducted a great deal of his teaching and subsequently where he was taken to die. It contains innumerable holy places. For them, Jerusalem has become a metaphor for heaven.

To the Muslims, the City is called Al Quds, the "Holy City" and the place where Mohammed was carried to the rock on Temple Mount on "the Night Journey". There he prayed with the prophets, Ibrahim (Abraham), Musa (Moses) and 'Isa (Jesus). From there he was "carried up through the seven heavens to the furthest limits".

GOD'S DEALINGS

"If ever there was a place of pilgrimage that draws people from all over the world, the prime example must be Jerusalem," says Professor Bowker. *"Jerusalem is a metaphorical and often literal focus of prayer and pilgrimage for Christians, Jews and Muslims. Those religions are significant for over half the world's population. In all those religions Jerusalem is the focal place where the purposes of God's dealings and his creation can be discerned. But at the same time, pilgrims from each religion go to see different sites, they touch different stones, they perform different rites,"* says Professor Bowker. *"Jerusalem has great significance to all these religions, but does not have the same significance."*

Professor Bowker says that while the religions have coexisted for long periods

in peace, the "Roads of Faith" project should not ignore that Jerusalem has also been the focus of conflict between them.

"In my view its absolutely essential in any inter-religious occasion always to take a hard look at the worst. The 'Roads of Faith' Project should not evade the contest, the competition and the conflict over Jerusalem that has occurred between these religions because that belongs to the very nature of the place. But we should try to discover what for each of these communities it is about Jerusalem that is of such inspiring, central significance. Let each religion speak authentically and without compromise for itself. There should be no blurring over the political tensions of the present time or at other times in its history."

Professor Bowker feels that while the "Roads of Faith" Project in itself will not automatically produce peace and reconciliation, it could be an important step. It could also open the way for much wider programme aimed at creating a "real dialogue between all religions", in much the same way as the Silk Roads project has created a dialogue between cultures.

A meeting of experts scheduled this month in Morocco will look at how the project should unfold and eventually broaden its horizons. *"The challenge and the opportunity for UNESCO which alone has the experience and expertise to achieve, is supreme."*

Paul LASHMAR

TO FIND OUT MORE ...

HISTORY OF CIVILIZATIONS OF CENTRAL

ASIA: Vol. I of this thoroughly documented and illustrated work presents Central Asian history from the dawn of time to 700 B.C., while Vol. II looks at the development of sedentary and nomadic civilizations from 700 B.C. to A.D. 250. UNESCO Publishing, 1992 and 1994.

THE SILK AND SPICE ROUTES: a series for children (see page opposite), including: Exploration by Land by Paul Stratham (1993),

and by Struan Reid, Exploration by Sea (1993), Cultures and Civilizations (1994) and Inventions and Trade (1994). UNESCO Publishing and Belitha Press, London.

All details of other publications prompted by the Silk Roads Study and its associated projects can be obtained from UNESCO Bookshops.

THE AFRICAN SLAVE TRADE FROM THE 15TH TO THE 19TH CENTURY: presents a

series of articles by a range of specialists, looking particularly at the ideological and political aspects of the African slave trade, the Atlantic slave trade, the slave trade within Africa and between Africa and the Middle East and the slave trade in the Indian Ocean. UNESCO, 1979. Second impression 1985.

The slave trade also appears in several of the eight volumes of the **GENERAL HISTORY OF AFRICA**. UNESCO Publishing.



The Silk and Spice Routes

*A series
co-published in English
by Belitha Press
and
UNESCO.*

Price per volume: 72 FF.

• In celebrating the centenary of cinema, UNESCO has created the **FELLINI MEDAL** to reward initiatives that enliven the art of film.



The medal's face is engraved with a profile of the famous Italian film-maker who died in 1993. Designed by the Italian painter Valerio Adami and coined by the Paris Mint. The first medal was awarded on 24 May to the Cannes Film Festival, represented by its president, Pierre Viot.

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▼ **"CONSTRUCTING PEACE,"** an illustrated booklet recently released by UNESCO describes the Organization's Programme of Assistance to the Palestinian People for 1995 - 1997. Providing an overview of activities in the West Bank and Gaza Strip, it focuses on efforts to renovate or set-up schools, a resource management system for coastal zones and support for a Palestinian radio and television station. The publication also highlights the priorities, strategies, financing and partners involved with the programme.

✉ Coordination Unit for the Assistance to the Palestinian People

UNESCO SOURCES

SPICE FOR THE MELTING POT

• **With ethnic and racial tensions simmering, the first international conference on cultural diversity couldn't have come any sooner.**

The opening "Festival of Rhythm" set the tone, the harmony and the excitement for the Global Cultural Diversity Conference held in Sydney, Australia, 26-28 April.

Before an entranced international audience, musicians from 12 different cultures held the stage for half-an-hour before the opening speeches. The festivities were designed to provide a universal language of rhythm to start the conference. The delegates and speakers, numbering about 1000 from 50 countries, took the point.

The conference message rang loud and clear throughout the three days in calling for greater cultural diversity and tolerance of each others' cultures - for the benefit of the individual, the community, the nation, the business sector and the world.

The conference, the first ever held on cultural diversity, was initiated by Australia to celebrate the 50th anniversary of the United Nations and to mark 1995 as the UN International Year for Tolerance, for which UNESCO is the lead agency.

It attracted politicians, world leaders, government officials, academics, indigenous peoples, migrants, business leaders and media representatives. All spoke for a more culturally diverse and tolerant world. But the fact that the conference was held showed the concern that much more is needed to make such a world a reality.

CRUNCHY PEANUT BUTTER

"I don't want cookie-cutter Canadians. I don't like homogenised peanut butter. I like crunchy peanut butter," summed up Canadian MP Sheila Finestone. Her country was the first to use the term multiculturalism to describe the active promotion of diversity of peoples within a nation.

Finestone stressed the impact of people on the move. She said that the world saw as many as 100 million people migrating every year. Eighty percent of them among developing countries. Nineteen million are refugees - more than double the number ten years ago. More than 20 million people are displaced annually within their own countries.

"Some would close their eyes to these changes. Some their borders. Neither solves the problems. Neither is of benefit to the host nation," Finestone said.

Another speaker highlighted the situation of peoples on the move in Europe. Mr. Tara Mukherjee, President of the European Union Migrants' Forum, estimated that the 13 million non-Community migrants, legally residing in the European Union, is the size of another state. They include Turks, Asians, North Africans, sub-Saharan Africans, Caribbeans, South Americans, Eastern Europeans as well as those who are stateless. Their contribution to society is substantial.

Asians, for example, provide nearly a quarter of the doctors in the UK National Health Service and nearly a fifth of British general practitioners. They also make up nearly six percent of British accountants and just under 50 percent of British retail traders. The same story is told in Germany, he said. Throughout Europe the transport, laundry, hotel and catering sectors would fall to pieces without migrant labour. "Essentially these migrants are perceived by the public as a problem and, at best, an opportunity to provide paternalistic assistance to the unfortunate, and not as an opportunity for the receiving countries," said Mukherjee.

Their economic contribution is also not reflected in their political rights. "Whoever heard of a Turkish MP in Germany, or an Arab MP in France. They have not even got the vote, never mind being eligible candidates. So in fact large swathes of the legally resident population, numbered in millions are effectually disenfranchised," Mukherjee explained.

In Asia too, there is a rising flow of migrant labour heading towards the region's emerging dynamic economies. This involves people of many nationalities with diverse backgrounds - from housemaids to oil engineers.

According to Dr. Manolo Abella of the International Labour Organization, between the 1980s and the 1990s, their numbers have increased from just over one million to more than three million.

Multiculturalism in countries across the world is a reality, speaker after speaker told the delegates. And with the migrants come their cultural differences, religions, outlooks and customs which has led to racial tension.

But as Professor Tomas Hammar of the Centre for Research in International Migration and Ethnic Relations at Stockholm University in Sweden pointed out, this does not have to be so.

The paradox is, he said, that the more a host country is willing to offer the ethnic communities, the more they would cease to identify as strongly with their ethnic groups of origin.

If, on the other hand, he said, immigrants are segregated from the majority, discriminated against, marginalised and even oppressed, it is natural that they would

a point of no return, he said. No longer can countries and peoples isolate themselves behind an iron curtain, he added.

"We believe that global communications will play a vital role in uniting the peoples of the world. Global communications give global access to information, contact and encounter, global appreciation of the diverse cultures of the world, access to market places, and a view of humanity as one."

In a sketch of what cultural diversity and ethnic diversity meant to school children, Patricia Greer, a black American spoke of being the principal of a school in an urban

seek refuge in their ethnic communities.

Yet, while integrating immigrants in the larger community, a careful balance is needed to avoid stripping them of their cultural identity and traditions. UNESCO's Director-General Federico Mayor told the conference that the Organization takes the view that education must protect and promote cultural identity.

While working to identify educational needs in this domain, UNESCO is also promoting rights for ethnic and cultural minorities *"to develop their own education, including mother-tongue instruction"*, Mr. Mayor said. However, it is not enough to foster an awareness of one's cultural and other rights, he added. Education must also be geared towards the dominant groups of a society, enabling people to develop *"an appreciation for the culture and achievements of minority groups,"* he said.

Jonathan Parapak of Indonesia's Department of Tourism, Post and Telecommunication also pointed to the importance of communications. Humanity has reached

community in Washington, DC. This was a school which did not enrol black students until the 1960s.

Yet 20 years later she has found that in a multi-cultural and racially diverse school, children are better prepared for the demands of the 21st century when *"it will be critical that people understand and communicate with populations throughout the world"*.

Another example came from Councilor Henry Tang, who is a Chinese Australian and now Deputy Lord Mayor of Sydney. He outlined the challenges and benefits to a city when it embraced cultural diversity in all aspects of its planning.

And Tang probably summed it up for all the delegates at the conference: *"Designing for cultural diversity is not easy,"* he said. *"But the rewards, if we get it right, are plentiful. A culturally diverse society is a richer, fairer and more exciting society. That is a goal well worth striving for."*

Robin SMITH
Sydney

• The REGISTERS OF DOCUMENTARY

HERITAGE covering national, regional and international levels was one of the recommendations made by the Advisory Committee of "UNESCO's Memory of the World Programme" at a meeting held at Headquarters, 3-5 May. The registered collections - manuscripts, texts, sounds and images - will also be part of a world list of library collections and archives in danger. The programme aims to safeguard and ensure access to documentary heritage by, for example, digitalising manuscripts on CD-ROM.

▼
SONOR - meaning "chase" in the Sakha language - is making its way to Paris with a competition at Headquarters on 3 May as part of UNESCO's Project 2000+, promoting scientific and technological education. The math game, which can be made at home, was inspired by traditional Siberian hunting techniques. It is now a favourite among herders, hunters and kids in the Sakha Republic where it



has been incorporated within the region's primary school curriculum, according to its inventor, Grigori Tomski of UNESCO's education sector. In addition to the competition organized with UNESCO's Children's Club, a second session was held for adults at the Académie diplomatique internationale in Paris.

OH MIGHTY CASPIAN!

Rising tides and fears hit the Caspian coastline.

What does UNESCO do? In which directions is it moving? With whom and for whom does it work? Answers should be found in the recently released **PROGRAMMES AND PRIORITIES 1994-1995**, offering a broad view of the Organization's objectives and work through a concise selection of activities concerning education, science, culture and communication.

How can we respect the environment while still accommodating for the swarms of tourists descending upon the world's most beautiful sites? The stakes are high as the tourism sector continues to grow, already employing 112 million people around the world

while representing 6% of the global economy. Trying to resolve environmental and economic interests, the World Congress on **SUSTAINABLE TOURISM**, organized notably on UNESCO's initiative, gathered representatives from international organizations and about 100 countries at Lanzarote (Canary Islands, Spain) from 24 to 29 April. The Congress adopted a charter appealing to governments, public and private organizations to respect environment protection principles as well as local cultural traditions and customs when developing tourist sites.

Even the seas have their ups and downs. Some 20 years ago, experts feared for a shrinking Caspian, damming a bay to hold on to the world's largest inland body of water... only to take it down just a few years later to make way for a rising Caspian which has already gained 2.5 metres.

Sounding the alarm, experts from the coastal countries - Azerbaijan, Iran, Kazakhstan, Russia and Turkmenistan - swapped notes about why this is happening and what could be done about it at a meeting organized by the Intergovernmental Oceanographic Commission (IOC) and the International Atomic Energy Agency (IAEA) at UNESCO, 9 to 12 May.

DRIED-UP BUDGETS

"The rise in sea level could be caused by regional climatic changes or global changes from industrial effects on the ozone," says Dr Dieter Kraemer of the World Meteorological Organization, who also attended the meeting. "These greenhouse effects are a concern around the world but the means to limit the emissions are so expensive, especially for the Caspian countries."

The experts couldn't agree more. After watching their research budgets dry up, most of them are now feeling pressured by their governments to predict just how far the sea will go. The stakes are high. Farming communities rim the fertile coastal lands and fisheries harvest the sea's sturgeon. Azerbaijan's capital, Baku, sits right on the shore, while pipelines linking gas and oil wells line Kazakhstan's coasts.

A catastrophe awaits in Turkmenistan where 70 years worth of radioactive waste

has been dumped 150 metres from the water's edge - an unwelcome Soviet legacy which the country cannot afford to move or protect, stressed government officials.

The Soviets also left their mark in Kazakhstan with pockmarked shores from nuclear explosions that were part of a plan, aborted eight years ago, to fill the craters with industrial waste. Rising tides could sweep the blasts' radioactive residue into the sea - in a region already prone to flooding from winds blowing off the Atlantic.

Unfortunately, little has survived of the Soviet network of Caspian research stations. "Now, with so many different countries, it is difficult to just collect data," says Dr Igor Shiklomanov, Director of Russia's State Hydrological Institute. "The political willingness to work together just doesn't make up for the lack of funds."

Funding problems seem to be going around. The IAEA/IOC Regional Caspian Sea project, accepted at the meeting, has just \$100,000 for isotopic techniques to trace the sea's pollution sources, evaporation rate, and composition. The two-year project will also use data collected from research cruises taken with the countries.

"It's an interesting project. But the real priority is coming up with a new coordinating mechanism involving the countries, international organizations and maybe private industry," adds Shiklomanov. "The oil companies, for example, need accurate predictions about the sea level. And they have money. But this arrangement might not solve the problem of sustainable development," he says. "Who knows? I'm a scientist not a fund-raiser."

A.O.

WHEN THE EARTH MOVES

Limiting earthquake damage in the eastern Mediterranean.

Earthquakes expert Iskander Sursock likes to tell how a journalist once asked him what he did "between quakes." The answer, he says, "is what seismology is all about."

Reducing the damage from earthquakes in the eastern Mediterranean is the aim of a project begun in June 1992 by UNESCO and the US Geological Survey (USGS) and the subject of a conference at UNESCO last month under the banner of the International Decade for Prevention of Natural Disaster Reduction (1990-2000). Forty or so experts and aid-donors attended.

Between the quake that destroyed Sodom and Gomorrah in the year 2150 BC and the one that killed more than 500 people in Dahshur, Egypt, in November 1992, earthquakes frequently bigger than six on the Richter scale, have often hit the region, anywhere from Yemen to Turkey.

"The quakes are around the buckling Arabian Plate," says Sursock, from the Beirut Centre for Geophysical Research. "They're also along the Levantine Fault, which runs from the Red Sea to the Mountains of Taurus. All the great civilizations of the Levant have literally crumbled at some time in their history."

TWO PRIORITIES

How can science protect the thriving human settlements in this oil-rich region whose growth might be stimulated by political peace? The conference identified two priorities - inter-regional cooperation and risk-management.

Nearly all the countries in the region now have a network of seismological observation stations, notes Badaoui Rouhban, of UNESCO's Earth Sciences Division. This means, says Walter Hays of the USGS, that scientists can predict more and more easily "where and with what force earthquakes will strike. Exactly when remains a puzzle of course. We have to set up more observation stations, analyse data more carefully and above all share that information."

"The observation stations in the network put their data together for the first time last year, but this isn't easy, because some countries - Cyprus and Turkey, and Israel and Lebanon or Syria - don't readily exchange information," Sursock says. So international organizations like

UNESCO and the Council of Europe, both of them in the programme, act as mediators.

UNESCO and the Council also have to persuade decision-makers to invest in prevention. The cost of earthquakes increases with the degree of urbanisation and development. The 1993 Los Angeles quake, worked out at \$40,000 per inhabitant while

this year's earthquake in Kobe, Japan, cost a huge \$70,000 per head.

To reduce the damage, micro-zones must be identified and maps drawn up to guide land use and building. New design rules must be laid down stipulating what materials can be used and what can be done to strengthen buildings to avoid collapses which kill people.

These rules cannot apply to old towns, where houses are often dangerously precarious and tightly packed together. "In such cases, UNESCO must be a teacher and get officials to persuade people to respect the basic code," says the head of Lebanon's National Scientific Research Council, Georges Tohmé: "Stay away from walls and power lines, don't turn on the gas, don't try to flee the area in vehicles, and keep a first aid kit in the house."

"We'll never be able to build risk-proof towns," says Robert Hamilton of the USGS, "but we can see to it that an earthquake doesn't turn into a national disaster."

Sophie BOUKHARI

• "How will we justify the energy systems of the 21st century?" asked historians, engineers, economists, social and political scientists during a meeting organized by UNESCO in 1993. Their contributions can now be read in both English and French with the book, "ENERGY AND SOCIETY", which was recently published by Editions Publisud (Paris). The book highlights the need for coming up with new energy development strategies which place the same emphasis on historical, social and cultural criterion as that given to technical and economic considerations.

▼ On 17 January, an earthquake ravaged the Japanese city **KOBE**, claiming some 5,500 lives. To help the survivors, UNESCO and Japan's Felissimo Corporation hosted an exhibition from 9 to 16 May at Headquarters which was followed by a concert on 17 May by French singer Salvatore Adamo. Proceeds from the recital, amounting to about 50,000 FF (\$10,000), will be given directly to the victims.

The exhibition displayed eye-witness accounts of the earthquake written by Kobe's residents alongside photographs and video images of the devastated city.

LOOKING AHEAD

CULTURE OF PEACE FESTIVALS are in store for children in Granada (Spain), 17 to 22 July, and in Amman (Jordan), 18 to 23 July. The Intergovernmental Oceanographic Commission's Coordination Group will examine future targets for the **TSUNAMI WARNING SYSTEM** at its 15th session in Papeete (French Polynesia) from 24 to 28 July. Pushing ahead with the final volumes of the **HISTORY OF CIVILIZATIONS OF CENTRAL ASIA**, the International Scientific Committee overseeing the series will meet in Beijing (China), 25 to 30 July. The Bureau of the Intergovernmental Council for the **INTERNATIONAL PROGRAMME FOR THE DEVELOPMENT OF COMMUNICATION** will review past activities and plan future projects during a meeting at Headquarters, 4 to 7 September. **INTERNATIONAL LITERACY PRIZES** will be awarded on **INTERNATIONAL LITERACY DAY**, 8 September, in Beijing during the fourth **WORLD CONFERENCE ON WOMEN**, organized by the United Nations, 4 to 15 September. UNESCO will not only be a key participant at the conference but will organize various round tables at the related **NGO FORUM** which will deal, notably, with women and Islam, sexual exploitation, war, peace and education. In Tokyo (Japan), some 250 participants are expected from 5 to 9 September at the 12th Collective Consultation of NGOs on **LITERACY AND EDUCATION FOR ALL**. An exhibition of works by the **GREEK PAINTER XANOS** will be shown from 11 to 22 September at Headquarters as part of the activities planned for the International Year of Tolerance. From 12 to 14 September, a sub-regional seminar on **EDUCATION STATISTICS** for countries of the former USSR will be held in Moscow (Russia).

On the eve of the Fourth UN Conference on Women, **OUR NEXT DOSSIER** will look at the three ages of **WOMEN'S LIFE CYCLES** and how culture and development have transformed them, serving as forces of liberation or repression.